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FINAL EVALUATION

OF THE

MEDICAL/UTILIZATION REVIEW DEMONSTRATION

PREPARED FOR

THE STATE OF MONTANA

DEPARTMENT OF SOCIAL AND REHABILITATION SERVICES

URBAN MANAGEMENT CONSULTANTS
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February 1, 1976

Mr. William Ikard
Chief
Medical Assistance Bureau
State of Montana Department of
Social and Rehabilitation Services
Helena, Montana 59601

Dear Mr. Ikard:

We are pleased to present to you our final evaluation of Montana's "Medical/Utilization Review" demonstration, Section 1115 project #11-P-40166/8-01. With the submission of this report, we complete our evaluation activities in behalf of this project.

This report begins with an *executive summary*, which presents a short summation of the project and the evaluation along with its findings, conclusions and recommendations. The rest of the report is organized as follows:

Part I presents a background statement, including the circumstances which lead up to the project and the basic project design. Part II presents the research design utilized in this evaluation, the findings of this research with respect to the demonstration hypotheses, and the conclusions we have drawn from these findings. Part III presents in detail the results of our examination of review records for all nursing homes in the State. Part IV presents the results of the interviews which were conducted with a representative sample of nursing homes reviewed both by the State and by local review committees. Part V presents the details of the cost analysis undertaken to compare the relative costs of the different review mechanisms evaluated in the project. Finally, Part VI presents other observations which were not part of the formal research but have relevance to the study nonetheless. Appendices appear at the end of this report which include data formats and other supportive documentation.

We would be pleased to answer any questions you might have concerning this report at your convenience. Thank you for the opportunity to be of service to the State of Montana.

Sincerely,

John R. Trauth

John R. Trauth
Managing Director

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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Under Federal law, skilled nursing homes are reimbursed for services they provide to residents receiving assistance under Title XIX of the Social Security Act. Federal regulations also establish two review procedures that states must use to assure the adequacy and quality of services in nursing homes which participate as providers under Title XIX. These two review procedures are "utilization review" and "medical review."

Utilization review ascertains whether the range and quality of care provided is appropriate to the needs of the resident. Such a review determines the proper "level of care" (i.e., intermediate or skilled), which is appropriate for a particular patient at a particular time. Appropriate level of care is determined primarily through examination of residents' medical and nursing home *records*. Level of care determinations also influence the reimbursement rate under which nursing homes are compensated for services provided to residents on assistance.

Medical review, on the other hand, concentrates not on records but on the *resident*. Its purpose is to determine how physician, nursing, personal and social services might be upgraded to improve the clinical and physical status as well as the social functioning of the patient. Accordingly, medical review involves the observation of every medical assistance resident personally.

Federal regulations describe these review procedures as two distinct operations, each of which requires a team of professionals to assess every participating skilled nursing home in the state. Requirements specify that a physician be involved in the review process.

The Problem

Montana is a large state with low population density and a general lack of a sufficient number of physicians to serve the population adequately. Therefore, since there were similar review requirements under Title XVIII (Medicare), medical and utilization reviews were initially serviced by Title XVIII review "committees" drawn from professionals located near the nursing home facilities. Following implementation of the intermediate care program, the state implemented medical and utilization review for intermediate care residents as well.

However, due primarily to the shortage of physicians, the number of these local review committees declined over the years. In order to continue to comply with regulations and insure that reviews were accomplished, the State of Montana inaugurated state-operated medical/utilization review teams to conduct reviews for those homes where committees were not operative. The remaining local review committees continued to service their original assignments.

Four state-operated "teams" were established to serve four separate geographic "districts" of the state. The state was unable to hire full-time physicians to work directly with the four teams; therefore, the teams became "nurse-headed" teams, using the state's medical consultant to provide assistance in review of those cases screened out for physician evaluation.

Since having a physician on-site for medical and utilization review is a Federal requirement, the State of Montana applied for and was granted a three-year "demonstration" project under Section 1115 which included a waiver of this requirement for the demonstration period. The project was entitled, "The Medical/Utilization Review" demonstration. As the title indicates, medical and utilization review were combined into one operation and were conducted simultaneously, during semi-annual visits to nursing homes which did not have operative local committees. The "Single State Agency" designated to be in charge of the project was SRS's Medical Assistance Bureau.

A project director was designated, who reported to the Chief of the Medical Assistance Bureau. The State-operated review teams were coordinated by two Medical Care Specialists, under supervision of the project director. Working with the Medical Care Specialists were four Registered Nurses, one for each of the four review "districts." The social worker from the local county welfare office joined the team for the on-site reviews. The teams

were also augmented by the Medical Assistance Bureau's professional consultants, including the State's medical consultant (a Helena-based physician) as well as a pharmaceutical consultant. During the demonstration period, these state teams conducted medical/utilization review for fifty of the state's nursing homes, while thirteen review committees performed these reviews for the remaining sixteen homes.

Project Evaluation

Since this demonstration project was an experimental variation from standard Federal regulations, the State of Montana was interested in conducting a formal evaluation of the project in order to determine the validity and effectiveness of this unique approach to meeting nursing home review requirements. Accordingly, the state contracted with Urban Management Consultants to perform an in-depth evaluation of the project. Since no special project funds were available for the project, the State financed the evaluation using regular 50% matching funds.

The evaluation design was based on a comparison among three different approaches to medical and utilization review:

- the state-operated review teams, with a physician involved on an as-needed, consulting basis;

- the state-operated review team with a physician on-site during review; and

- local review committees, using physicians on-site during review.

The second approach described above, the state-operated review team with a physician on-site during review, was not operational due to funding limitations, but was nevertheless "constructed" under hypothetical circumstances to estimate the cost of conducting reviews under this approach.

Three "hypotheses" were to be tested in the course of the evaluation. These hypotheses postulated that (1) the State "team" approach would be equivalent to the "committee" approach in performing medical and utilization reviews; (2) that "nurse-headed" state teams with a consultant physician would be the least costly method for accomplishing medical and utilization reviews when compared to the committees or to the State teams with a physician on-site; and (3) that using a physician in a consulting role in accomplishing reviews is a more efficient method of utilizing the limited supply of physicians in Montana.

In order to test these hypotheses, three basic activities were undertaken:

- executive interviews were conducted by UMC consultants with selected nursing home administrators, directors of nursing, physicians involved in nursing home reviews, and State and Federal SRS representatives;

- medical/utilization review records were examined for all nursing homes in the state for FY 1974-1975 and key data was recorded for analysis and comparison purposes;

- cost data were gathered from the SRS Fiscal Bureau and the project continuation requests in order to approximate the costs of each of the three review approaches on a total and unit cost basis.

A detailed analysis was undertaken of data generated from these three sources. The findings and conclusions as a result of these efforts are presented in detail in the body of this report and are summarized below.

Findings

The results of the executive interviews with nursing home personnel revealed the following:

-- committee reviews occur more frequently than State team reviews, but concentrate primarily on utilization review; medical review is rarely if ever addressed.

-- State team reviews are much more thorough and complete with respect to both types of review, and better records are maintained of State reviews.

-- Changes in level of care were reported to occur much more frequently under the State team approach than under the committee approach.

-- Under the State team approach, the consultant physician was rarely called upon, and in several cases, nurses dealt with medical issues.

-- The necessity of having a doctor present for the reviews is a controversial issue, with the committee-reviewed homes favoring it and the State-reviewed homes opposing it.

-- Homes tend to prefer their present review mechanism, be it State or committee.

Findings from the review of the FY 1975 medical and utilization review records for all nursing homes in the State revealed the following:

-- Due to the higher frequency of committee reviews, committees conducted proportionally more reviews per home than did the State teams (7.8 compared with 2.1).

-- The State teams reviewed five times as many homes and four times as many patients as the committee homes. However, based on the average number of residents in a home in the year, the total number of "Medicaid-patient-reviews" was only 18% greater for the State teams compared with the committees.

-- A significantly higher proportion of residents in committee-reviewed homes were classified as requiring "skilled" care, compared with the percentage in State-reviewed homes (78% compared with 52%).

-- As a result of 135 reviews conducted by the State teams, 434 "quality of care" recommendations were made; as a result of 107 reviews conducted by

committees, the records indicated no quality of care recommendations, further supporting the interview findings that medical review is not occurring under the committee approach.

-- Based on the average number of Medicaid patients in a home during the year, the homes reviewed by the State teams had level of care changes three times as often as did the committee homes.

-- The level of care was more frequently reduced from skilled to intermediate under the State team approach (57% were reduced compared with 43% which were raised); level of care was more frequently raised under the committee approach (62.5% were raised compared with 37.5% which were reduced).

Findings from the examination of cost data with respect to the different approaches to conducting medical and utilization review are presented in the following table:

Measure \ Type of Review	1. State team: consulting physician	2. State team: physician on-site	3. Committee: physician on-site
Total Costs Per Annum:	$41,500.00	$89,500.00	$10,835.00
Cost Per Review	$ 334.68	$ 725.80	$ 101.26
Cost Per Average Number of Medicaid Patients Reviewed:			
(chargeable costs only)	$ 23.21	$ 50.33	$ 13.69
(including admin. time)	$ 23.21	$ 50.33	$ 25.43
Cost Per Nursing Home Per Year:			
(chargeable costs only)	$ 658.73	$ 1,428.57	$ 416.78
(including admin. time)	$ 658.73	$ 1.428.57	$ 773.93
Cost Per Level of Care Change:			
(chargeable costs only	$ 139.73	$ 303.03	$ 243.12

The findings shown in the above table are summarized as follows:

-- Total costs are greatest for the State review team with a physician on-site, and least for the committee approach.

-- Costs per review follow the same pattern, although the difference is reduced due to the greater frequency of committee reviews.

-- Under the committee approach, a significant amount of time is spent in preparation for the reviews, which is not the case for State team reviews. This preparation time is not charged against the State, but is realistically a cost of conducting the review.

-- Cost per average number of Medicaid patients reviewed in a year, counting chargeable costs only, are highest for the State team approaches and lowest for the committee approach; however, when the additional administrative preparation time in the committee approach is added, the State team approach using a consulting physician becomes slightly less expensive than the committee approach.

-- The same relationship as described immediately above exists with respect to cost of reviews per nursing home per year.

-- Cost per level of care change is lowest under any circumstances for the State team with a physician consultant, due to the greater frequency of level of care changes under this approach.

Conclusions

It is apparent from the findings of this evaluation that a State-operated medical/utilization review team approach using a physician on a consulting basis was not only equivalent but was in fact

superior in performing medical and utilization reviews when compared with the local review committee approach. In fact, it was discovered that medical review is in most cases not being performed by the committees. Even utilization reviews performed by the State teams were found to be superior to those performed by committees, as indicated by the review records and specific review products. Level of care changes were three times as frequent under the State team approach and tended to reduce level of care from skilled to intermediate, while the committee approach tended to raise level of care from intermediate to skilled.

Costs for accomplishment of medical and utilization reviews were considerably less when utilizing a physician on a consulting basis compared with an on-site role, under the State approach. When the State approach was compared with the committee approach, total costs and costs per review were less under the committee approach. However, cost per patient reviewed in a year was less under the State team-consulting physician approach and was less under all circumstances with respect to cost per level of care change.

The results of this evaluation raise substantial questions as to whether level of care is being adequately addressed under the committee approach. As a result of this situation, more residents in committee homes are presently classified as "skilled," and level of care changes are not only one-third as frequent in

committee homes compared with State homes but are in the opposite direction! Further, the evaluation also indicates that medical review is not being addressed under the committee approach.

Another significant observation concerning the State team approach concerned the low frequency of involvement of the consulting physician in the reviews. The interviews with nursing home personnel in homes under the State-team approach indicated that nursing home personnel felt that medical problems were being resolved by the nurses themselves. This observation suggests that either the consulting physician was underutilized in the State team reviews or that there is further reason to question whether it is necessary to have a physician on-site during the reviews, since the nurse-headed teams appeared to deal effectively with these issues.

Recommendations

In spite of the problems associated with the committee approach as identified above, we found no conceptual reason why the committee approach to medical/utilization review could not be effective. The problems were more in the implementation of the concept than in any basically inherent fault. The State team approach was an improvement in terms of the thoroughness and comprehensiveness of the reviews. Also, due to an increased variety of exposure of the State team members, there were

additional inherent advantages which enabled the State team to relate better to standards and insure consistent interpretation of regulations. In addition, this exposure also helped the team to serve in a better "technical assistance" capacity in transferring information and improved procedural methods from one home to another, which was not possible under the committee approach.

Nevertheless, there were certain elements of the committee approach which also had distinct advantages. Local physicians are more likely to know and take an interest in the individual residents than is a consulting physician who is rarely on-site. Also, nursing home administrators saw a considerable advantage to the committee approach in that it complemented their efforts to get physicians to make their monthly patient visits.

All the facts and experiences of this evaluation lead us to make the following recommendations:

Recommendation 1: Retain the State Review Team Approach: The State of Montana should advocate with Federal representatives to retain the State-review team approach to review those nursing homes where local committees are not established.

Recommendation 2: Improve the Quality of Committee Reviews: The State should act to improve the quality of both medical and utilization review being conducted by the committees. This could be accomplished through more direct overseeing

of the committees' activities, and enforcing the requirement that medical review be undertaken. Individuals familiar with the State team approach could serve as "consultants" to the committees in order to accomplish this end.

Recommendation 3: Insure Adequate Use of the Physician Consultant: The State should act to insure that the teams make adequate use of the physician consultant to deal with those medical issues which arise as a result of the team reviews which are beyond the nurse's capabilities to resolve. In addition, a system to record the frequency and type of physician involvement should also be established.

Recommendation 4: Minimize the Adversary Relationship: Due to different reimbursement rates, multiple levels of care continue to foster an adversary relationship between the State and nursing homes. Steps should be taken to minimize this circumstance. Should future regulations permit, a single level of care would encourage a more constructive attitude on the part of nursing home personnel with respect to reviews and their findings and recommendations.

The Medical/Utilization Review demonstration in Montana has demonstrated a unique approach to accomplishing high quality medical and utilization reviews in nursing homes. It would be unfortunate if the positive results of this approach were not put to use. Even if the State should elect to implement the PSRO approach to medical and utilization review, the implementation of this approach should build upon the experiences and lessons learned from this demonstration. The most direct way in which this could occur is through utilizing the personnel who were involved in the State team approach as participants or consultants in implementing the new approach so that the State can derive maximum benefit from the experiences of this demonstration.

PART I

BACKGROUND

I. BACKGROUND

Under Federal law, skilled nursing homes are reimbursed for services they provide to residents who receive assistance under Title XIX of the Social Security Act. Federal regulations establish certain controls and procedures to assure the provision of the appropriate level of high quality services to nursing home residents. The Compilation of Federal Regulations identifies two specific procedures that states must use to review the adequacy and quality of services in nursing homes which participate as providers under Title XIX. These two procedures are "utilization review" and "medical review."

Federal regulations describe these review procedures as two distinct operations, each of which requires a team of professionals to assess every participating skilled nursing home in the state. There are several differences between the two reviews:

(1) Utilization review has the purpose of ascertaining whether the range and quality of care in a nursing home is appropriate to the needs of the resident, whereas medical review has the purpose of upgrading professional services being provided in the nursing home and improving the general well-being of the resident.

(2) Utilization review concentrates on whether services and facilities provided to nursing home residents are medically necessary and determines whether the provision of these services and facilities constitutes

appropriate utilization, underutilization, or over-utilization. On the other hand, medical review concentrates on the resident himself and determines how physician, nursing, personal and social services might be upgraded to improve the clinical and physical status and social functioning of the resident.

(3) Utilization review primarily involves the examination of residents' medical and nursing home records. Medical review additionally involves the examination of every medical assistance resident personally.

Since the introduction of the Title XIX program in the State of Montana in July of 1967, Montana's Medical Assistance Bureau has worked toward ensuring that Title XIX skilled nursing home residents are receiving all the services necessary and commensurate with their clinical, physical and social needs. During the six years of experience under the program, the State has modified its approach several times, learning from experience and responding to changing conditions, attitudes, and Federal requirements.

Initially, medical/utilization review was serviced by Title XVIII review committees drawn from professionals located near the nursing home facilities. The local review committees worked with an evaluation point system and certification procedure developed by the Medical Assistance Bureau and the Montana Nursing Home Association. Later, the review system was modified to include a descriptive type of evaluation which allowed for

more adequate assessment of quality of care as well as levels of care. Following implementation of the intermediate care program, the State promoted full medical/utilization review for intermediate care residents as well. However, the number of local review committees declined over the years. Hence, the number of homes and residents being serviced by the review also declined.

As a result, the State expanded its approach and inaugurated State operated medical/utilization review teams to conduct reviews for nursing homes without periodic review, while the remaining local review committees continued to service their original assignments. Because the State was unable to hire full-time physicians to work directly with the four State operated teams, the teams became "nurse-headed teams" using the State's medical consultant to provide peer-review of those cases screened out for physician evaluation.

The "Medical/Utilization Review" demonstration in Montana was designed to respond to Federal regulations regarding the review of nursing homes as well as to the special conditions in Montana, a large state with low population density and a lack of sufficient physicians to serve the population adequately. As the project title indicates, medical review and utilization review have been combined into one operation. Several teams throughout

the state conduct both reviews simultaneously during semiannual on-site visits. This allows both types of reviews to be accomplished together and thereby become mutually supportive efforts. The intention was to make the review process one of positive assistance to Montana's nursing homes and their residents.

Under the "Medical Utilization Review" demonstration, the Federal regulations which require that a physician be present and serve as team-leader at on-site medical reviews were waived for the State of Montana until April 1, 1976. During this period, the State tested two different approaches to the makeup of review teams. A third approach using a physician on a state team was anticipated but was not implemented due to funding limitations. For evaluation purposes, the costs of the physicians were superimposed on the state team approach and comparisons made with the other two approaches. Each approach has its own operating characteristics that may or may not allow for improved skilled nursing home care under the medical/utilization review framework. These approaches are described below.

The first approach is called the "nurse-headed review team." These teams take advantage of the project's waiver and do not have a physician present during on-site reviews in nursing homes. However, the nurse-headed review teams do have available the services of the State's medical consultant on a consultant basis.

When the teams encounter a situation that requires the professional knowledge of a physician, the case is referred to the medical consultant for further review and recommendations. There are four such teams operating in Montana, which review a majority of the skilled nursing homes in the State.

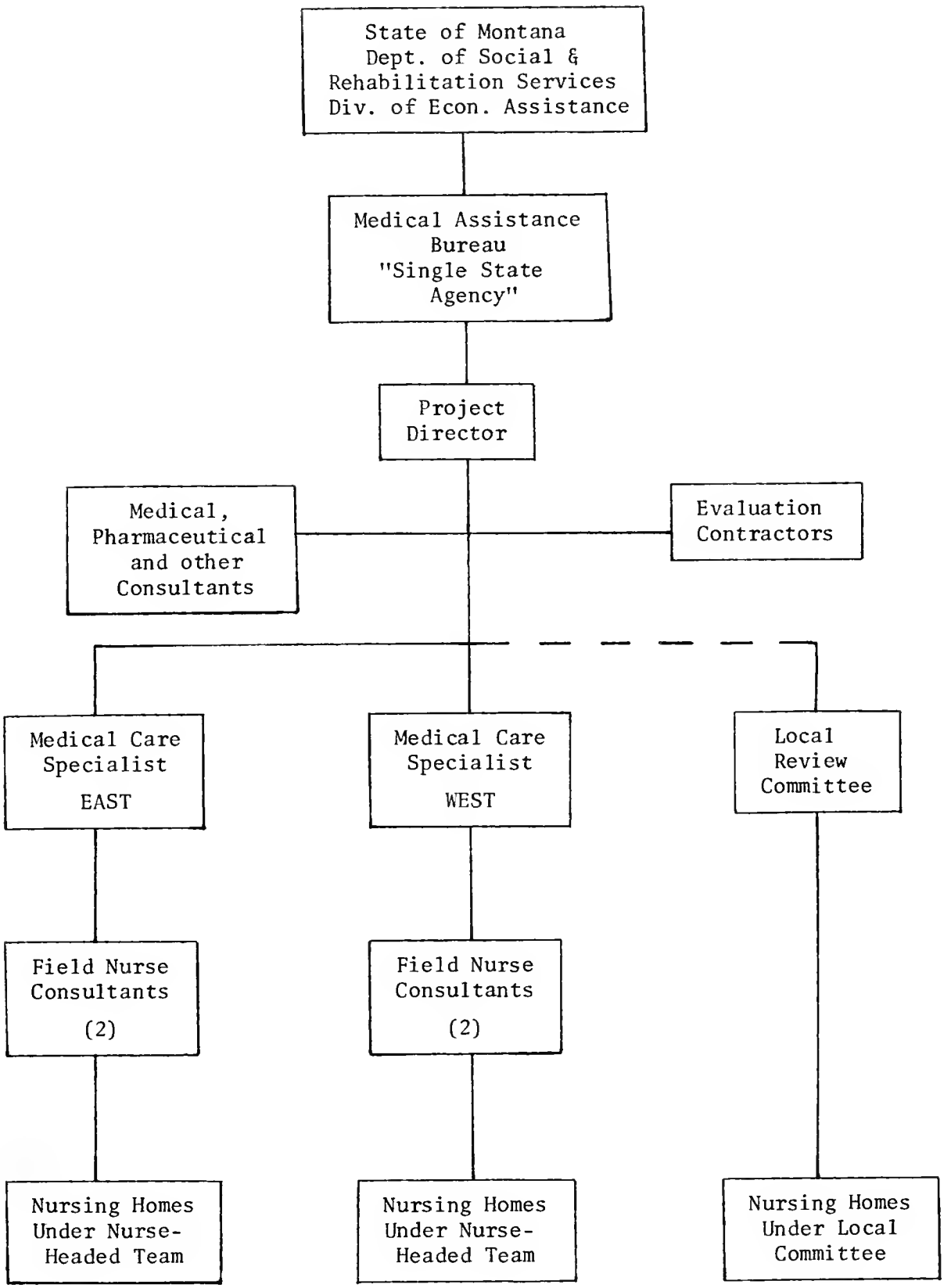
The second approach utilizes Medicare Title XVIII utilization review committees to conduct medical/utilization review for Title XIX skilled nursing home residents. There are ten committees carrying out review responsibilities under this project, each of which is made up of professionals who live in the vicinity of the nursing homes which they review. These committees are known as "local review committees" to distinguish them from the State-operated review teams.

Project Organization

The organizational structure under which the project operated is presented graphically in Exhibit I on the following page. The "Medical/Utilization Review" project was under the general authority of the State of Montana Department of Social and Rehabilitation Services, Division of Economic Assistance. The Medical Assistance Bureau is a subdivision under Economic Assistance and is designated as the "Single State Agency" for administration of the Title XIX State plan. This agency initiated

EXHIBIT 1

PROJECT ORGANIZATION CHART



the project and is responsible for carrying out the project's activities as a "demonstration project" under Title XIX, Section 1115 of the Social Security Act.

The State operated review teams are coordinated by two Medical Care Specialists, both MSW's under the direct supervision of the Project Director. Each Medical Care Specialist has the responsibility for coordinating medical/utilization reviews conducted by the State. Montana's skilled nursing homes have been divided almost equally between the two Medical Care Specialists, with one Specialist coordinating reviews in the Western District and the other coordinating the Eastern District. From time to time the Project Director also assists the Medical Care Specialists in the performance of Medical/Utilization Reviews especially in the very large Eastern District.

Working with the Medical Care Specialists are two Registered Nurses in each review district. In the Western District, one nurse is located in Helena and the other in Missoula. In the Eastern District, one nurse is located in Wolf Point and the other in Red Lodge. A Medical Care Specialist and a nurse form the basic State operated medical/utilization review team. The Social Worker from the County Welfare Office who is located in the nursing home's county joins the team for on-site reviews.

The State operated medical/utilization review teams are augmented by the Medical Assistance Bureau's professional consultants, primarily the medical consultant, a Helena-based physician, and a pharmaceutical consultant, a registered pharmacist and a full-time employee of the Medical Assistance Bureau. Professional consultants are drawn into reviews on an as-needed basis. For instance, should a team encounter a case that requires the professional knowledge of a physician, the case is referred to the medical consultant for further review and recommendations.

Eleven local review committees also serve in the capacity of utilization reveiw committees for the Title XVIII program. The local review committees are autonomous from the State's Medical Assistance Bureau but conduct reviews for the Title XIX program through agreements made between the Medical Assistance Bureau and each committee. However, the project director has the responsibility of assuring that the local committees conduct medical/utilization review according to the requirements of the Title XIX State plan.

An Advisory Committee for the project was to represent various aspects of skilled nursing home care. This committee included a physician, a nurse, an occupational therapist, a social worker, a skilled nursing home administrator, and a physical therapist. The only meeting of the committee was held in February, 1974.

Evaluation Component

Initially, project staff attempted to develop the evaluation component of the demonstration internally. The staff developed an assessment instrument to enable the statistical comparison of performance among the different review mechanisms. The instrument was to be used in a selected sample of nursing homes and results analyzed for comparative purposes.

However, there were many difficulties inherent in the project staff's attempt to implement the evaluation component internally. First, the design and implementation of the evaluation effort was very time consuming. The addition of this responsibility to the extensive effort required to carry out medical utilization review demanded time beyond staff's capacity. Secondly, project staff was concerned that they could not carry out the evaluation component objectively. Admittedly, the State believed that the State operated nurse-headed teams were effective and responsive to conditions in Montana. The fact that project staff had worked long and hard to implement this method of review created the possibility that any evaluation conducted by them might be inadvertently biased.

In order to relieve the pressures of time and to provide for an objective evaluation, the Medical Assistance Bureau contacted

Urban Management Consultants to prepare a proposal to evaluate the Medical Utilization Review Demonstration for the State of Montana. UMC submitted a proposal on September 21, 1973, that described a process for performing both operational and impact evaluation for the demonstration which would result in a complete and comprehensive evaluation. However, the State did not have sufficient funds to undertake the complete evaluation as proposed. Based on the project's need to begin evaluation activities immediately, UMC agreed to develop the operational evaluation component first in order to minimize initial evaluation costs.

Early in the process of defining the operational characteristics of the project, Urban Management Consultants and project staff decided that the project would be best served if the research design were developed to address both operational and impact considerations in order to facilitate early implementation of the impact evaluation system should special project funds be made available for the project's second year. These special project funds were not forthcoming and the full and comprehensive impact evaluation was not able to be implemented. The final research design, which includes the definition of the demonstration hypotheses and evaluative criteria, is presented in Part II of this report.

PART II

RESEARCH DESIGN, RESULTS AND CONCLUSIONS

II. RESEARCH DESIGN, RESULTS AND CONCLUSIONS

Exhibit II-1 on the following page represents the basic research design utilized in this evaluation. The evaluation design involves comparison of three different methods of reviews: (1) the State-operated review teams with a physician involved on an as-needed, consulting basis; (2) the State-operated review with a physician on-site during review; and (3) the locally-operated review committees utilizing physicians on-site during review.

As Exhibit II-1 indicates, these three cells were compared on various measures, including the quality of the review, the cost of the review, and the role of the physician. These comparisons were made using the data sources indicated in Exhibit II-1. Results are discussed later in this part of the report.

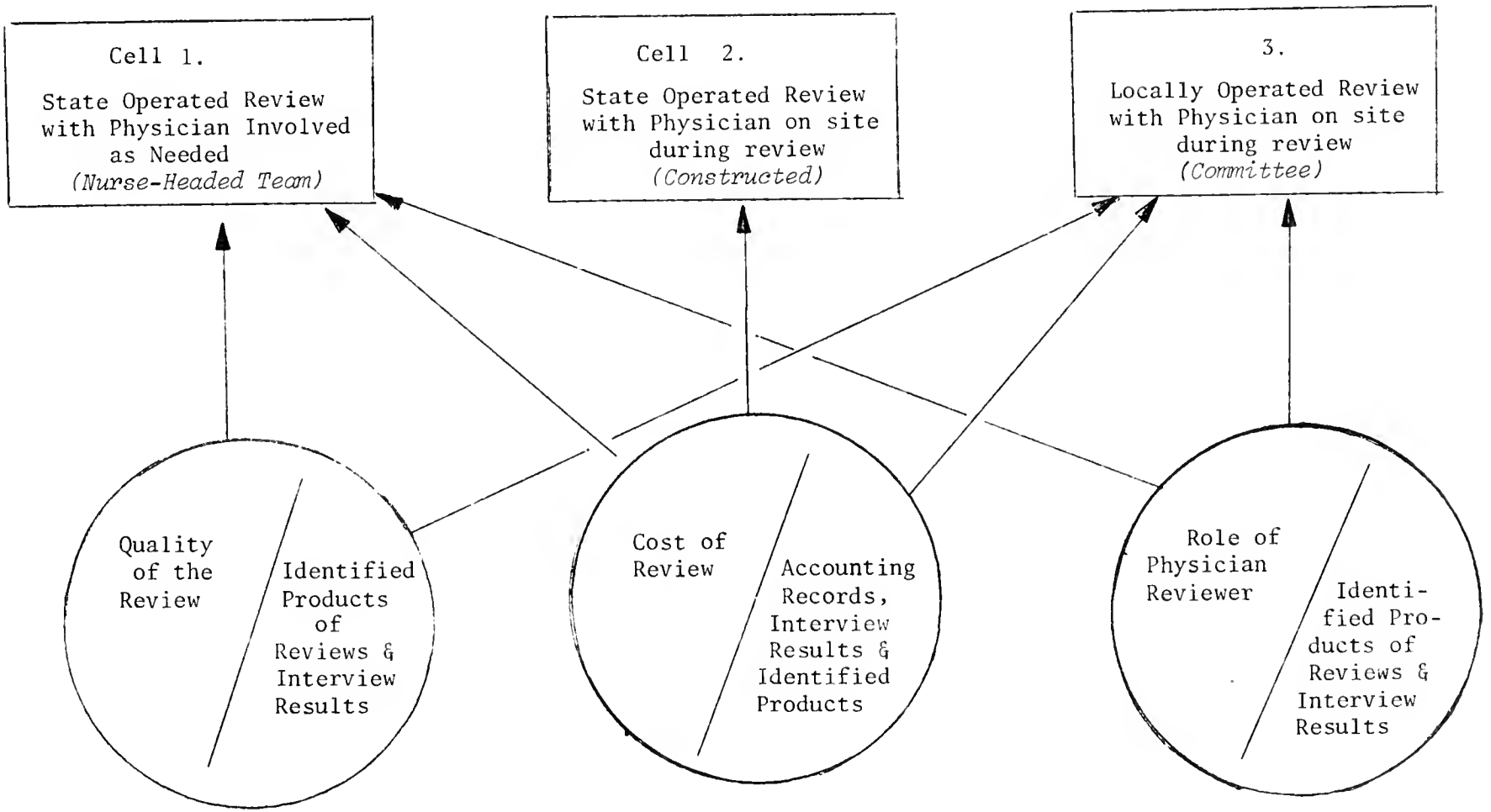
The major evaluation activities focused on the State teams (Cell 1) and the local committees (Cell 3). The committees were established and functioned in accordance with Federal regulations. The State team approach operated under a waiver of these regulations. The State approach did not include a physician on site, but instead used the State SRS physician on a consulting basis. In addition, State reviews were conducted less frequently (semi-annual rather than monthly or quarterly). The State approach, including a physician on site (Cell 2) was not operational but was "constructed" under hypothetical circumstances for purposes

EXHIBIT II - 1

EVALUATIVE RESEARCH DESIGN

FOR THE

MEDICAL/UTILIZATION REVIEW DEMONSTRATION



of this evaluation. This was necessary since funds were not available to implement this approach. However, estimates of the cost of this approach were included in the cost analysis by superimposing the cost of physician services on the costs of the regular State team.

Research Design Implementation

Three basic data sources were utilized in conducting this evaluation. The data sources were (1) executive interviews with selected nursing home administrators, directors of nursing, physicians involved in nursing home reviews, and Federal SRS representatives; (2) examination of medical/utilization review records for the entire State of Montana; and (3) cost and budget information from grant applications and the State SRS fiscal bureau. These data sources and our methods of extracting data are described below.

Interviews

The major effort in this area involved conducting interviews with selected nursing home personnel. Since the number and geographic dispersement of nursing homes in Montana precluded conducting interviews in all of the State's nursing homes, a sample of nursing homes was selected. The number of nursing homes which were being reviewed by local committees is relatively small, numbering only 14. Therefore, with the exception of three homes, all of these

nursing homes (11) were included in the sample. In selecting nursing homes which were under State review, we stratified the sample to include a representative mix of the following variables: size of the home, urban or rural location, percentage of skilled care beds, and geographic location (east or west). All of these variables were closely matched except geographic location which was not possible since nearly all "committee" homes are in eastern Montana.

The choice of nursing homes for our sample was reviewed with the State. Subsequently, a letter of introduction was written by the State and sent to each of the twenty-two nursing homes to be visited. A copy of this letter is shown in Appendix A at the end of this report. A list of the twenty-two homes visited is shown in Exhibit II-2 on the following page.

In preparation for these interviews, discussions were held with the State project team to formulate various issues to be addressed by the interviews. Based on this input, a draft interview instrument was developed. This instrument was then pre-tested in both nursing homes reviewed by local committees as well as homes reviewed by the State teams. Based on the findings of the pre-test, the instrument was modified to allow for more input from "State" homes regarding the actual or potential role of physicians in the review.

The questionnaire was designed to gather information from nursing

EXHIBIT II - 2

LIST OF MONTANA NURSING HOMES INTERVIEWED

Review Mechanism: State Nurse-Headed Teams - Western District

Names of Nursing Homes	Location	Urban versus Rural	# SNC Beds	Total MA Beds	Size Class
Crest Nursing Home, Inc	Butte	Urban	40	103	Large
Silver Bow Annex Nursing Home	Butte	Urban	50	72	Medium
Cascade Co. Convalescent Home	Gt. Falls	Urban	229	229	Large
McAuley Nursing Home	Gt. Falls	Urban	41	48	Medium
Park Place N.H. Rehab. Ctr.	Gt. Falls	Urban	65	65	Medium
Valley View Estates N.H. Inc.	Hamilton	Rural	58	98	Large
Hillside Manor	Missoula	Urban	107	107	Large
St. Joseph Nurs. Retirement Ctr.	Polson	Rural	80	80	Large
Colonial Manor Nursing Home	Whitefish	Urban	29	39	Small

Review Mechanism: State Nurse-Headed Teams - Eastern District

Namesof Nursing Homes	Location	Urban versus Rural	# SNC Beds	Total MA Beds	Size Class
St. Clare Hospital	Ft. Benton	Urban	20	20	Small
Central Montana Hosp.-N.H.	Lewistown	Rural	40	40	Small

EXHIBIT II - 2 (Cont'd)

LIST OF MONTANA NURSING HOMES

Review Mechanism: Local Review Committees

Names of Nursing Homes	Location	Urban versus Rural	# SNC Beds	Total MA Beds	Size Class
Glendeen Nursing Home	Billings	Urban	36	36	Small
St. John's Lutheran Home	Billings	Urban	44	87	Large
Valley Conv. Nursing Home	Billings	Urban	98	98	Large
Western Manor Nursing Home	Billings	Urban	158	158	Large
Yellowstone Co. Nursing Home	Billings	Urban	50	59	Medium
Parkview Acres Conv. Nurs. Home	Dillon	Rural	39	54	Medium
Big Horn Co. Mem. Nurs. Home	Hardin	Urban	10	10	Small
Flathead Co. Nursing Home	Kalispell	Urban	49	66	Medium
Immanuel Lutheran Home	Kalispell	Urban	53	89	Large
Laurel Nursing Home	Laurel	Urban	29	29	Small
Valley Vista Manor	Lewistown	Rural	90	96	Large

home administrators and directors of nursing in the following areas: awareness of the medical/utilization project; perceptions regarding the thoroughness of the reviews; the involvement of nursing home staff in the reviews; attitudes of nursing home personnel toward the reviews; the composition and operation of the review committees; and perceptions regarding involvement of physicians in the reviews. A copy of the interview instrument is presented in Appendix B.

The interviews were conducted over a two-month period and spanned 22 nursing homes, half of which were reviewed by the State and half by committees. In most cases, both the administrator and director of nursing were interviewed together. The interviews generally lasted from one to two hours in each home. The completed interview instruments were then coded and the results analyzed. The detailed results of these interviews are presented in Part III of this report.

In addition to the interview activity described above, other less formalized interviews were held. Federal representatives of the SRS Region VIII office and SRS Central office were interviewed by phone to gain their perceptions of various components of the project. Also, Dr. Maronick, the State's Consulting Physician, was interviewed to gain his personal insights into the advantages and disadvantages of utilizing consulting physicians on an "as needed" basis in conducting medical and utilization reviews.

Review Records Examination

The second major data gathering activity involved a detailed examination of the review records of all nursing homes in the State. A data analysis plan for this examination was presented to the State project director for his review. Based on his input, a final analysis plan and data collection instrument was developed. A copy of this form is presented in Appendix C.

Utilization review records date back several years for many nursing homes. In order to conduct a valid comparison, fiscal year 1974-1975 was chosen as the study period. This period was chosen because records were most current and the project was fully operational during the entire year.

The following information was recorded for each home:

- The dates of review;
- The number of medical patients reviewed on each date;
- The number of Skilled Care and Intermediate Care patients reviewed;
- The number and type of level of care changes;
- The number of M.D.'s and R.N.'s attending the review;
- The number of quality of care issues or recommendations documented in each review;
- The extent of nursing home personnel involvement (person hours) in each review;

-- The average number of Medicaid patients in the nursing home during the year.

Part IV of this report presents a detailed discussion of the results of this records examination.

Cost Information

The third source of data in this evaluation consisted of financial information from the Fiscal Bureau of the Department of SRS and budgeted costs from the project's continuation requests. Actual project expenditures for travel, phones, and training were available from the fiscal bureau. However, personnel costs associated with the project (other than for the nurse consultants) were not available. Since the State accounting system was not able to provide actual expenditure data on personnel associated with the project, the projected salaries and percentages used in the project continuation requests of 1975 (and verified by project staff) were used. In order to approximate the cost data for constructing Cell 2 (State team with an M.D. on site), the number of consultant physician hours that would have been spent (based on the number of nurse consultant hours actually spent) in FY 1975-76 was multiplied by $25 (the rate which the State pays M.D.'s on committees). This figure was added to the cost for Cell 1 to approximate the cost of Cell 2. (Coincidentally, if the State were to hire a M.D. full time rather than on an hourly basis, the total cost of the added physician review would be nearly the same.) Indirect costs were not charged against the project although an indirect cost rate of 43% was established.

Results

The evaluation design involved three hypotheses to be tested in assessing the relative effectiveness and cost of each method of conducting medical and utilization reviews. The three hypotheses address: (1) the quality of the reviews; (2) use of physicians for review; and (3) cost of review. Criteria were specified for assessing each hypothesis, and data from the three sources of information described above were related to each criteria in order to determine findings and conclusions for each hypothesis.

Each hypothesis is presented below, followed by the criteria used to assess that hypothesis. Results for each criteria and conclusions with respect to each hypothesis follow.

Hypothesis

A. *That a State Operated Medical/Utilization Review Team consisting of a registered nurse and a social worker using a physician on a consulting basis is equivalent in the performance of the Medical/Utilization Reviews to a Local Review Committee.*

This hypothesis contends that the State Review Team with the physician in a consulting role yields reviews at least equivalent to the Committee method of review. Since most services offered in a nursing home are directly provided by registered nurses, it follows that nursing care has a large impact on patients' well being.

Therefore, the best possible evaluation of nursing homes might be accomplished by nurse-headed review teams. This hypothesis also implies that the State teams have an improved ability to relate to standards since they are located within the State SRS structure rather than being located completely at the community level.

Criteria

This hypothesis was tested by examining the following criteria:

-- Frequency and thoroughness of reviews, resulting in equivalent fulfillment of Title XIX regulations for Medical/Utilization Review by Nurse-Headed teams compared with Committees.

-- Comprehensiveness and timeliness of review reports, recommendations and action memos.

-- Consistent application of standards in determining level of care by teams compared with committees.

-- Fewer successful appeals by nursing homes of levels of care changes.

-- Equivalent satisfaction of nursing home personnel with respect to findings and recommendations of Nurse-Headed teams compared with Committees.

-- Satisfaction with Nurse-Headed teams by both Federal representatives and Montana SRS administrators.

-- Willingness by nursing home staff to accept and implement recommendations offered by Nurse-Headed teams.

-- Increased familiarity and knowledge of standards and guidelines by State teams as compared to Committees.

-- Improved understanding and acceptance by nursing home administrators of reasons for changes in level of care.

Findings

The interviews with nursing home administrators and the review records examination yielded results specific to each of the above criteria. These are discussed below.

Frequency and Thoroughness of Reviews, Resulting in Equivalent Fulfillment of Medical/Utilization Regulations

The State teams reviewed nursing homes every six months, performing both medical and utilization reviews simultaneously. The majority of the administrators of State-reviewed nursing homes felt that this six month interval was appropriate. In comparison, over 60% of the Committee-reviewed nursing homes felt that the monthly-quarterly Committee review schedule was too frequent, and resulted in a waste of manpower.

The interview data and the records examination both indicated that the State reviews are extremely thorough. In fact, every administrator in State-reviewed homes felt that the reviews were very thorough. The review records indicated that each patient's records were examined and each patient was visited during each review. In addition, specific patient care recommendations were made at nearly each review and averaged 3.2 recommendations per review. The Committee review approach also meets the criterion of timeliness and frequency of reviews. Committee reviews averaged 7.2 homes per

year, since some Committees review quarterly and others monthly. However, the thoroughness of Committee reviews fluctuated greatly among the Committees. While most Committee-reviewed nursing home administrators felt the reviews were thorough, examination of review records did not so indicate. In many cases, patients were rarely if ever visited, and many times only a summary of the patient's records was examined. The records examination discovered no patient care recommendations made by Committees as the result of 107 reviews, compared to 434 such recommendations by the State as a result of 134 reviews.

Examination of records and interview data indicated, therefore, that the State teams were much more thorough than the Committees, which in some cases did not fulfill utilization review requirements and rarely medical review requirements.

Comprehensive and Timely Review Reports

The State team records were found to be both comprehensive and timely. They consist of a summary page including all level of care changes and all compliance issues or recommendations. This document is supplemented by the actual review notes of each patient including the patient's name, case number, diagnosis, progress notes, and medications. This report is prepared and a copy sent to the nursing home from one to three weeks after the review.

The Committee records were found to be timely but were neither consistent nor comprehensive. They fluctuate considerably with respect to format and quality. Many Committees simply prepare a list of patients' names or numbers and an indication of the level of care recommended. A few Committees prepare minutes that include some statement of the patient's history and current condition. However, these are usually repeated verbatim each month. No specific recommendations were found with respect to medical care or procedures in the records of any of the Committee homes.

Consistent Application of Standards

Neither the examination of review records nor the interviews yielded specific data which addressed consistent application of standards. Nevertheless, several conclusions can be drawn from personal observations in the course of this evaluation.

The State uses four teams consisting of four separate R.N.'s and three medical specialists. This team meets regularly in insure consistent procedures in the application of regulations during reviews.

The Committee approach, on the other hand, consists of a dozen separate committees. Each committee may have several M.D.'s that alternate in serving on the committees. The separate committees do not meet with each other, and there is no formal method for

information sharing. The only common process found was that several committees use the State review forms. Examination of records showed considerable inconsistencies among committee procedures and practices. Therefore, it appears that the State team approach is much more likely to result in consistent application of regulations than is the Committee-review approach.

Successful Appeals

Since there were no formal appeals of level of care determinations recorded, we were not able to assess this criterion.

Equivalent Satisfaction with Reviews

The level of satisfaction with the methods and results of the reviews were assessed in the interviews with nursing home administrators and heads of nursing. Eighty percent of Committee homes and 72% of State homes felt that the findings of the review were "fair," in spite of the fact that level of care changes were three times as frequent under the State approach. Only 36% of Committee homes felt reviews were necessary while over 90% of State homes felt they were needed. A majority of both Committee homes and State homes (80%) felt that the reviews were helpful. The cumulative effect of these findings is that the acceptance by State homes of the methods and findings of the review is at least equivalent to the degree of acceptance by Committee homes.

Satisfaction of State Approach by Federal and State Representatives

The State SRS personnel were very satisfied with the project and felt that it represented a good way of performing medical/utilization reviews. Federal officials were very cautious, however, and expressed skepticism that reviews without a physician on-site would be permitted beyond the expiration of the three-year demonstration period. They were generally familiar with the project concepts but were not convinced that regulations would be changed to permit reviews to occur without a physician on-site.

Willingness to Accept Recommendations

The interviews indicated that nursing home personnel in State homes generally accepted level of care determinations (72% felt findings were justified) as well as the patient care recommendations (83% felt the reviews were helpful and 55% felt they improved patient care). The Committees enjoyed a higher degree of acceptance of their findings (over 80% felt findings were justified and reviews were helpful), although it must be noted that the Committees made very few level of care changes and did not make specific patient care recommendations. (It should be remembered that most level of care changes under the Committee review were from intermediate to skilled - which explains the greater concurrence among Committee homes since reimbursement rates are higher for skilled care.)

Knowledge of Standards and Guidelines

The evaluation generated no specific data with which to assess the issue of knowledge of standards or regulations. However, as with the criterion of consistency, the State teams, via their frequent meetings and training sessions, were observed to be in better position to have a good working knowledge of standards and guidelines than Committees. While neither Committee members nor State team members were interviewed, the findings of the interviews with nursing home personnel indicated that 45% of State homes were able to differentiate clearly between medical and utilization reviews as stated in Federal regulations, while only 20% of Committee homes were able to make this distinction.

Acceptance of Level of Care Determinations

Nursing home administrators in State homes disagreed occasionally with the findings of the review team. However, there was rarely, if ever, any doubt as to why the findings were made. Committee homes, on the other hand, were more satisfied with determinations. It is difficult to make a direct comparison on this issue, since for Committee homes, only 22 level of care changes were made out of 107 reviews, compared with 297 changes out of 135 reviews for State teams.* A level of care change by a Committee was so rare as

*There were 56 level of care changes per 1000 Medicaid patients under the Committee review process, compared with 166 level of care changes per 1000 Medicaid patients under the State review process.

to be a major event and the nursing home personnel were usually very familiar with the cases. It is difficult to say whether this would be true if the committee had the same relative number of level of care changes as the State teams.

Conclusion

The State teams perform a significantly more in-depth, comprehensive review than do the Committees. In fact, in some cases the Committees may not be performing both medical and utilization review. Most nursing home personnel agreed that registered nurses were the most appropriate type of review agent (rather than M.D.'s or social workers). Therefore, we conclude that a State Operated Medical/Utilization Review Team consisting of a registered nurse and a social worker using a physician on a consulting basis is at least equivalent, and in most cases superior, in the performance of the Medical/Utilization Reviews to a Local Review Committee.

This hypothesis is therefore supported.

Hypothesis

B. That the Nurse-Headed Medical/Utilization Review Team concept will result in considerably reduced cost for the accomplishment of Medical/Utilization review compared with either the Committee or the Physician-Headed Medical/Utilization Review Team concepts.

The hypothesis assumes that the Nurse-Headed Team concept, using a physician on a consulting role only, is able to accomplish all of the required elements of Medical/Utilization reviews for lower costs than the Physician-Headed Team or equal cost of the Committee concept. Since a physician is not necessarily on site and since the combination of medical and utilization reviews might result in greater efficiency, a nurse-headed team concept may be the most economical method for accomplishing medical/utilization review in nursing homes.

Criteria

This hypothesis was tested by examining the following criteria:

-- Lower reimbursement costs for physician services for the review process.

-- Reduction in travel costs resulting from review combination.

-- Reduction in assistance costs through adequate level of care determinations.

-- Favorable attitudes of Federal representatives and SRS administrators towards methods of cost reduction.

Findings

Findings of this evaluation specific to each of the above criteria are presented below.

Lower Physician Reimbursement Costs

The actual costs of physician services in connection with medical and utilization reviews were difficult to determine. Neither the M.D.'s on Committees (Cell 3) nor the State Consulting M.D. (Cell 1) have charged the Project for all of their time spent in connection with reviews. For the State approach, the State SRS fiscal bureau has rectified this situation and now applies approximately 20% of the State consulting M.D.'s part-time salary of $7,200 annually (or four hours per month at $25 per hour) against the project. This is the figure used in our cost analysis in Part V.

Many of the Committee M.D.'s do not bill the State for all or some of their review services. Since it is impossible to determine exactly how many do bill for full reimbursement (as discussed further in Part V), we computed the approximate amount they were entitled to invoice and used this figure (which equalled $4,755/year).

The hypothetical cost of M.D. services under Cell 2 were also estimated according to both an hourly consulting rate as well as a salaried physician cost. These costs are $50,000 and $49,500 respectively. It is apparent, then, that physician costs are much lower for Cell 1 than for Cell 2 or Cell 3.

Reduction in Travel Costs by Combining Medical and Utilization Reviews

If the State teams performed medical reviews separate from utilization reviews, travel costs would increase by nearly 50% since they now make two trips per home per year, and the addition of a separate medical review would necessitate an extra trip for each home. This additional cost would be approximately $2,150. Therefore, the combination of medical and utilization reviews result in a savings equal to this amount ($2,150).

Reduction in Assistance Costs Through Adequate Level of Care Determinations

Actual Medicaid costs directly associated with this Project were not available. However, there are three findings which are relevant to this criterion: First of all, the Committee homes have a much larger percentage of SNC (Skilled Nursing Care) patients than do the State homes (78% compared to 52%). Since we have attempted to hold constant the other variables (such as size of home, geographic location, urban or rural setting, etc.), we believe that this high percentage of SNC patients may be explained by the lack

of enforcement of level of care regulations by the Committees. In addition, if State reviews resulted in a similar percentage of skilled care determinations (78% rather than 52%), costs would increase due to the higher reimbursement rates for skilled care. Second, the State teams had over three times as many level of care changes per Medicaid patient than did the Committees. This suggests a lack of rigorous enforcement of regulations by the Committees.

Third, and most important, level of care changes made by the State teams lowered the level of care more often than raising it (57% were lowered, compared to 43% raised), while the opposite case was true for Committees (37.5% were lowered, compared to 62.5% raised).

These three findings taken in concert show that the State team approach (Cell 1) resulted in relatively lower Medicaid costs than was the case for the Committee approach (Cell 3).

Conclusion

Findings of this evaluation indicate that the cost of physicians' services are lower under the State approach (Cell 1) than under either the Committee approach (Cell 3) or the M.D.-Headed State approach (Cell 2). Accordingly, cost of review per patient, cost of review per home, and cost of review per level of care change

were all lowest for the State approach (Part V presents a detailed account of these costs). Not only does the State team approach result in a more thorough review as discussed above, but it also turns out to be the least expensive method.

Therefore, this hypothesis is supported.

Hypothesis

C. That use of physician services in a consultative role to resolve problems identified by the Medical/Utilization Review Team (Cell 1) is a more efficient way of utilizing the limited supply of physicians than the physician on-site role utilized in the Physician-Headed Teams concept (Cell 2) and the Local Committee concept (Cell 3).

The rural character of the State of Montana combined with the scarcity of physicians creates a circumstance wherein the use of physicians in a consultant role may be more appropriate to medical/utilization review than having a physician on site during review. If medical/utilization review can be accomplished under the guidance of a physician who is not necessarily on site, then physicians' efforts and time can be more efficiently and more effectively directed to those nursing homes that require physician assistance as identified by the Medical/Utilization Review Teams.

Criteria

This hypothesis was tested by examining the following criteria:

-- Maintenance of adequate physician review services as measured by frequency of site visits as compared to request for site visits identified as necessary by teams.

-- Maintenance of adequate physician review services as measured by frequency of off-site responsiveness as compared to requests for this service by teams.

-- Favorable reaction of consulting physicians to their consultant role.

-- Perceptions of increased efficiency and effectiveness through the use of consulting physicians for review by attending physicians, nursing home personnel, and SRS administrators.

Findings

Findings relative to each of the above criteria are discussed below.

Adequate Physician Review Services On-Site

The State consulting physician was rarely requested to visit a nursing home. In those cases when this request was made, the physician did make an on-site investigation.

The registered nurses and medical specialists on the State team agree that the State physician has responded in a timely manner to requests for both on-site and off-site assistance. Off-site responses usually consisted of a phone call or letter to a nursing home or to an attending physician. Most nursing home administrators that were aware of the State physician felt that the availability of his services, should they be needed, was a good arrangement.

Adequate Physician Review Services Off-Site

No records were kept of when R.N.'s on the State team contacted the State physician as a result of their on-site reviews. The State physician estimates this occurrence at approximately twice a month. These contacts are prompted by findings of the reviews. There is also no mention made in any of the State team review records of the need or intention to contact the State physician. The 25 estimated physician contacts in a year appears low to address all of the "M.D. peer review" and "medical" issues that would be expected to arise in 135 reviews involving 1788 medical patients. While the lack of data prevents a definite determination, it appears that the State physician is not contacted each time there is an M.D.-related issue. However, the nurse-headed teams appeared to be adequately dealing with these issues.

Reaction of the Consulting Physician

The State consulting physician was interviewed to gain his opinion of the program and his role in it. Dr. Maronick felt that his services are not generally required on-site in reviews and that he is best utilized in an off-site consulting role. He believes that his input to attending physicians or nursing home administrators can be effectively communicated by phone or letter. With respect to direct on-site team participation (Cell 2), he personally would not be willing to travel as an on-site physician nor does he believe

the State could find qualified physicians to serve in that capacity.

Opinions About a Physician in a Consulting Role

Many of the nursing home administrators interviewed were not aware of the State consulting physician. Those who were felt that utilizing him in an off-site capacity was appropriate. Several administrators and nurses in Committee homes felt that an "outside" physician would not be able to address patient problems adequately, particularly if the physician never saw the patients.

Conclusion

With respect to physician services in support of medical/utilization review, it is evident that the State physician was not heavily utilized by the State team, as indicated by the following observations:

1) Infrequent contacts with the physician by the State team.

2) Only 4 hours a month of physician time associated with reviews.

3) Infrequent on-site reviews by State physician.

4) Evidence in the interviews that the R.N.'s on the State team were addressing physician-related issues themselves (although these issues appeared to be adequately resolved by the R.N.'s).

However, with the exception of the half dozen Committees in the State that have physician-headed committees, we found that it is very difficult, if not impossible, to obtain physicians for reviews. Indeed, this fact was of prime importance in the establishment of the demonstration project in the first place.

The experience of the project therefore indicates that using a physician in a consulting role to resolve medical issues identified in reviews is a more efficient way to make use of limited physician resources. However, whether or not this process is effective depends upon the degree to which a physician's services are important in the reviews. The experience of this project has adequately demonstrated that a physician constantly on-site during reviews is not necessary in order for adequate medical/utilization review to occur. Nevertheless, care should be taken to insure that adequate utilization of a physician's services occurs with respect to those issues which are primarily medically-related and beyond the capabilities of the R.N.'s to resolve.

Therefore, since physician services were infrequently utilized, we conclude that this hypothesis is only partially supported.

Overall Conclusions

It is apparent from the findings of this evaluation that a State-operated medical/utilization review team approach using a physician on a consulting basis was not only equivalent but was in fact *superior* in performing medical and utilization reviews when compared with the local review committee approach. In fact, it was discovered that medical review is in most cases not being performed by the committees. Even utilization reviews performed by the State teams were found to be superior to those performed by committees, as indicated by the review records and specific review products. Level of care changes were three times as frequent under the State team approach and tended to reduce the level of care from skilled to intermediate, while the committee approach tended to raise level of care from intermediate to skilled.

Costs for accomplishment of medical and utilization reviews were considerably less when utilizing a physician on a consulting basis compared with an on-site role, under the State approach. When the State approach was compared with the committee approach, total costs and costs per review were less under the committee approach. However, cost per patient reviewed in a year was less under the State team-consulting physician approach and was less under all circumstances with respect to cost per level of care change.

The results of this evaluation raise substantial questions as to whether level of care is being adequately addressed under the committee approach. As a result of this evaluation, more residents in committee homes are presently classified as "skilled," and level of care changes are not only one-third as frequent in committee homes compared with State homes but are in the opposite direction! Further, the evaluation also indicates that medical review is not being addressed under the committee approach.

Another significant observation concerning the State team approach concerned the low frequency of involvement of the consulting physician in the reviews. The interviews with nursing home personnel in homes under the State-team approach indicated that nursing home personnel felt that medical problems were being resolved by the nurses themselves. This observation suggests that either the consulting physician was underutilized in the State team reviews or that there is further reason to question whether it is necessary to have a physician on-site during the reviews, since the nurse-headed teams appeared to deal effectively with these issues.

PART III

RESULTS OF REVIEW RECORDS EXAMINATION

III. RESULTS OF REVIEW RECORDS EXAMINATION

The examination of medical/utilization review records was a primary source of data for this evaluation. The methodology employed in gathering this data included examination of all review records for the twelve-month period of FY 1974-75 for all nursing homes in Montana (with the exception of large State institutions which were not included in the project). Exhibit III-1 on the following page displays a summary of the information obtained.

As expected, the State teams reviewed many more homes than the committees. This is due to the low number of committees in the State. The committees conducted proportionally more reviews per home than the State (7.8 per year compared to 2.11 per year). Some committees met monthly and others quarterly, averaging slightly more frequently than bi-monthly.

It was found that the average number of Medicaid patients in homes under committee review was slightly more than the number under the State reviews (30 for committees, compared to 28 for the State teams). Two other measures of scope of review were utilized in this evaluation. The first measure was the concept of "Medicaid patient-review." A patient review consists of one medical/utilization review of one Medicaid patient. It is derived by an actual count of patients under all reviews during the study period. This factor is naturally skewed toward the more frequent review, under the

EXHIBIT III-I

RESULTS OF MEDICAL/UTILIZATION RECORDS EXAMINATION

Descriptive Statistics	"State" Reviewed Homes	Committee Reviewed Homes
Number of Nursing Homes	63	14
Number of Reviews in FY 74-75	135	107
Average Number of Medicaid Patients	1,788	426
Number of Medicaid Patient Reviews	3,653	3,094
Percentage of Skilled Nursing Care Patients	52%	78%
Number of Quality of Care Recommendations (as shown in records)	434	-0-
Number of Medicaid Patient Days	652,620	155,490
Level of Care Change Statistics		
Number of Level of Care Changes	297	22
Level of Care Change per Medicaid Patient Review	81 per 1,000	8 per 1,000
Level of Care Change per Medicaid Patient	166 per 1,000	56 per 1,000
Level of Care Change per Medicaid Patient Day	45 per 100,000	15 per 100,000
Level of Care Change per Nursing Home per Year	4.7	1.7
Level of Care Change per Review Session	2.2	.009
% of Level of Care Change from Skilled to Intermediate	57%	37.5%
% of Level of Care Change from Intermediate to Skilled	43%	62.5%

committee approach. The other measure used was the "average number of Medicaid patients," which was determined by eliminating double counting of patients in the year and averaging for the 12 month period. (These figures were randomly confirmed by the Dikewood MMIS system in Montana.) This is an important measure since it allows for valid comparisons between homes of different sizes and types, despite the more frequent review schedule of committee homes. It enables estimations of review results and costs per Medicaid patient, rather than per Medicaid patient-review. This measure was also extrapolated to the average number of Medicaid patient days (average Medicaid patients in the home X 365) which is a unit measure extensively used in nursing home studies.

As indicated in Exhibit III-1, the state had only slightly more Medicaid patient reviews than the committees (18% greater), despite the larger number of homes and Medicaid patients under State review. The State reviewed nearly five times as many homes, and four times as many patients as the committee homes. While both the State homes and the committee homes averaged about 30 Medicaid patients per home, an average of only 16, or 52%, of the State patients were skilled while 24, or 78%, of the committee patients were skilled. The high preponderance of skilled patients in committee-reviewed homes is significant, since there are reasons to suggest that this situation exists because the committee review system is not as rigorous in determining level of care as the State

team. This issue is discussed further later in this report.

The level of care changes (skilled to intermediate or intermediate to skilled) are a very important measure in this evaluation. By computing the frequency and number of level of care changes, it is possible to determine the degree to which the level of care standards are being addressed by the two review mechanisms. A low incidence of level of care changes would suggest that patients' level of care is not being adequately addressed.

As shown in Exhibit III-1, there were nearly 12 times as many level of care changes per Medicaid patient-review for the State homes as for the committee homes. However, this statistic is misleading since committees review the same patients more frequently and, therefore, the frequency of change would be expected to be lower. To eliminate this problem, we divided the number of level of care changes by the average number of Medicaid patients in the homes during the study period. As a result of this adjustment, it was found that the homes reviewed by the State had level of care changes more than 3 times as often as the committee homes!*

An extensive examination was also made of the direction of level of care recommendations under the State team approach and the committee approach. It was found that the level of care was more

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* It is also interesting to note that a substantial share of the level of care changes made in committee homes were made by the one committee whose outside R.N. was a member of the State review team.

frequently reduced from skilled to intermediate under the State team approach (57% were reduced compared with 43% which were raised); level of care was more frequently raised under the committee approach (62.5% were raised compared with 37.5% which were reduced).

The other issue addressed in this analysis was the number and frequency of recommendations or suggestions which directly deal with the quality of patient care (as opposed to the level of patient care). As is indicated in Exhibit III-1, the results indicate that the homes reviewed by the State teams received a great number of such recommendations (over 3 per review on the average). No such recommendations or statements were evident in any of the review records of all of the committees. However, this does not mean that quality of care recommendations were never made. It simply means that if recommendations were made, they were not recorded. Nevertheless, these findings do suggest that quality of care issues were not given as much focus or attention under the committee approach as under the State approach. This finding was further confirmed through our executive interviews with nursing home personnel, as reported in Part IV of this report.

PART IV

RESULTS OF NURSING HOME VISITS

IV. RESULTS OF NURSING HOME VISITS

As discussed in Part II of this report, executive interviews with selected nursing home administrators and head nurses was an integral component of this evaluation. There are thirteen nursing homes in Montana which are reviewed by local committees. Of these, we were able to interview eleven. Since this evaluation utilized a comparative approach between State teams and committees, State-reviewed nursing homes were selected which resembled the committee homes with respect to size, percentage of Medicaid patients in the home, and urban or rual character. (See Exhibit II-2 in Part II for a list of the homes interviewed.)

Following selection of homes to be visited, an interview guide was developed. Both the subject areas and specific questions were reviewed by the members of the State project. This interview guide was then pretested by two UMC consultants with both nursing homes reviewed by the State team and those reviewed by local committees. After incorporating the changes and modifications from the pretest, the actual interview instrument was finalized and interviews were conducted with the selected nursing homes throughout the State. These interviews were preceded by a letter of introduction from the State Project Director.

Generally, the interviews lasted from one to two hours in each facility. Some problems were encountered, however, in arranging

meeting times with some of the busy nursing home administrators. This caused us to substitute the St. Joseph's Retirement Center in Polson for the Wayside Nursing Home in Missoula in our nursing home sample. The problem of determining suitable meeting times also caused the interview process to extend over an 8 week period.

The interviews were designed to obtain information in the following areas:

-- awareness of the project and related issues;

-- the quality of utilization and medical reviews;

-- the involvement of nursing home staff in reviews;

-- the extent to which physicians are currently involved or should be involved in medical and utilization reviews.

The results of these interviews are presented below.

Detailed Interview Results

Upon completion of the interviews in the nursing homes, the results were coded and analyzed for each question. Total response frequencies were calculated for each question. In addition, responses were analyzed by the key variables: State-reviewed home vs. Committee-reviewed home; size of the home; and urban or rural setting. In addition, an analysis was done of all responses to determine whether there were consistent attitudinal patterns associated with the different review approaches.

Detailed findings for each question are discussed below. Overall conclusions from the interview process follow these detailed findings.

Awareness of the Project

The first question probed nursing home personnel on their awareness of the demonstration project. Results were rated on a five point scale, from 1 = low awareness to 5 = high awareness and understanding of the project.

As expected, the homes which were reviewed by the State teams had a very high awareness and understanding of the project, and nearly 80% of these homes received a "5" rating. Only 40% of the Committee-reviewed homes received this rating. Nevertheless, awareness of the project was generally good among most of the Committee-reviewed

homes. Less than 30% of the Committee-reviewed homes received a "1" rating.

Both State-reviewed and Committee-reviewed homes indicated that reviews had been taking place "ever since we had public funding" (Medicare, Medicaid or Kerr-Mills).

Ability to Define Medical and Utilization Reviews

Respondents were next questioned on their understanding of the definition of medical and utilization reviews, and the distinction between them. State-reviewed homes were better able to make a distinction between the two types of reviews. However, a high percentage of both State-reviewed homes and Committee-reviewed homes had difficulty with this question. Fifty-five percent of State-reviewed homes and 64% of Committee-reviewed homes received a low "1" rating on this question. The larger homes in urban areas were generally better able to deal with the distinction between medical and utilization review. Nevertheless, the responses to the question clearly indicate that there is a need to clarify this issue further.

Further questions regarding the reviews that were taking place indicated that, in the vast majority of cases, the Committee-reviewed nursing homes were only undertaking utilization review, whereas

the State review process included both medical and utilization review. Only two of the eleven Committee-reviewed homes reported doing medical review - one small, rural home and one large, urban home. Clearly, the State-review process insures that both reviews occur, and they are always done simultaneously. Nevertheless, the question as to the State's responsibility in insuring that medical review occur, even in the Committee-reviewed homes, is one which should be addressed by SRS.

Frequency of Review

Respondents were asked to report how frequently reviews were conducted. The results of this question showed that reviews were much more frequent under the Committee approach than under the State-team approach. Thirty-six percent of the Committee homes reported that reviews were conducted monthly, and the rest of the Committee homes reported that reviews occurred at least every three months. The larger, urban homes tended to report more frequent (monthly) reviews. The State-team reviews are conducted only semi-annually (but were found to be much more thorough and in-depth, as reported later in this section). Ten out of the eleven homes under the State review reported that reviews occurred semi-annually. One home reported "once a year," although the records indicated that this home had, in fact, been reviewed semi-annually as well.

Notification of Review

Regulations specify that no more than 48 hours notice be given to homes prior to review. In all cases, the homes reported that they had been notified prior to the review. Notification by phone was the most frequent method, although half of the State-reviewed homes also reported having been notified by letter. Four of the Committee homes reported that they had called for the review themselves, so they were the ones doing the notifying.

Next, the respondents were asked how soon before the review they had been notified. State-reviewed homes were unanimous in reporting "1 to 3 days" prior to the review. Committee responses were less uniform, and ranged from "one day before" to "more than a week before." Several of the Committee homes reported that they had set a definite day each month for the review and notification was only necessary if the date had to be changed for some reason. This circumstance was generally the reason for the "more than one week" responses.

Participants in the Review

If nursing home administrators and heads of nursing are present in the review, it is more likely that they will be familiar with the regulations and the actions taken by the review team. Therefore, several questions were asked to determine who was present

in the review meetings. When asked how often the administrator of the home was present for the review, the Committee-reviewed homes reported that the administrator was present "always" in 64% of the cases, and "usually" in 27% of the cases. Only one Committee-reviewed home said "rarely."

The smaller, Committee-reviewed homes were unanimous in saying that the administrator was "always" present.

There was considerably more variation in responses to this question among the State-reviewed homes. Half of the responses were "always" or "usually," and half were "occasionally" or "rarely." Homes located in urban areas tended to answer "occasionally" or "rarely" to this question. Only one rural, State-reviewed home gave this response.

The next question asked how often the Head of Nursing was present for the review. Here responses were quite uniform for both State and Committee homes. Seventy three percent of the State-reviewed homes and 82% of the Committee-reviewed homes reported that the head of nursing was "always" present during the review.*

Additional questions probed the role of the administrator and the head of nursing in the review. The administrator was most frequently

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*However, the project director indicated that most (90%) homes under State review have the Director of Nursing accompanying the State team, and that the State sample selected was not representative on this issue.

reported as serving as a "reference person" during the review. This was the case for homes under both review approaches. In addition, the head of nursing was also reported to serve in this capacity during the review in Committee-reviewed homes, whereas State-reviewed homes were split in reporting this role as "reference person" and "active participant." One large, Committee-reviewed urban home described the head of nursing as the "leader" of the review.

Feedback from the Review

Respondents were next asked whether they received any "feedback" as a result of the review. Nine of the eleven State-reviewed homes reported that they "always" received feedback after the review, and this was in the form of a report on the review and its findings from the State team.

The Committee-reviewed homes were less positive about "feedback." Several cited the notes or minutes which they took during the review as the only type of record that was kept of the review. Others cited "oral" feedback. The records review described in Part IV of this report found that Committees' review records were generally not as complete nor as consistently maintained as the records which were generated from the State review teams.

Thoroughness of the Review

Next, a series of questions was asked of nursing home personnel

to determine how thorough the reviews were and to compare the different processes employed in the reviews.

The first question asked how often each patient was visited during the review. Nine of the eleven State-reviewed homes reported that each patient was "always" visited, and the remaining two said that each patient was "usually" visited during the review. Committee-reviewed homes reported the opposite. Only one home said that each patient is "always" visited. All of the rest said "occasionally," (3 homes), "rarely" (4 homes), or "never" (1 home). The larger, urban homes tended to answer "rarely" to this question.

The next question asked how often each patient's records were inspected during reviews. "Always" was the unanimous answer for all of the State-reviewed homes. However, only three Committee-reviewed homes answered this way. The rest again responded "occasionally" (3 homes), "rarely" (4 homes) and "never" (1 home). Again, the larger, urban homes tended to answer "rarely."*

We next asked who visited the patient. State-reviewed homes were again unanimous in reporting that the entire team visited the patients during the review. Only five Committee-reviewed homes answered this way. Two Committee homes reported that only the nurse from the review team visited the patients. No Committee

* In interpreting the replies to this question, one should remember the greater frequency of reviews by committees.

homes reported that the doctor visited the patients.

When asked who reviewed the patients' records, all of the State-reviewed homes reported that the entire team reviewed the records together. Only three committee-reviewed homes responded this way. Five homes reported that the nurse alone reviewed the records, and one home reported that the doctor reviewed the records.

For the six Committee homes which reported that each patient's records were not examined during each review, we asked how often each patient's records were reviewed. Four of the homes responded "at least quarterly" and the two others reported "at least once a year."

Respondents were next asked how long each review lasted per patient and how many patients were seen per hour. Responses indicated that the State teams spent more time per patient (usually in excess of 10 minutes) and saw 5 to 6 patients per hour. Committee reviews averaged approximately 3 minutes per patient, and 15 to 20 patients per hour. Of course, the Committee reviews were conducted more than twice as frequently, but even taking this into account, it appears that more individual attention to individual patients occurs under the State team approach than under the Committee concept.

Results of Reviews

Nursing home personnel were asked to describe the results, if any,

which occurred because of the review. Responses fell into three categories: changes in level of care, improvement in patient care, and changes in procedures.

"Changes in level of care" was the most frequent response for both the State and Committee homes, although this response was given more frequently by State-reviewed homes. "Changes in procedures" was the second most frequent response, and was reported equally for both approaches. "Improvement in patient care" was the third most frequent response, and was also reported in equal frequencies. Taking all the homes together, 51% mentioned changes in level of care, 30% mentioned changes in procedures, and 19% mentioned improvement in patient care as a result of the reviews.

Perceptions of the Review

A series of questions was asked to determine nursing home personnel's perceptions of the reviews. The results of these questions are reported as follows.

Respondents were asked whether they thought the reviews were necessary. A majority of both types of homes agreed that the reviews were necessary, although State-reviewed homes felt more strongly that they were. Only one State-reviewed home felt that they were not necessary. A strong minority of the Committee homes (five of the eleven interviewed) felt that the reviews were not necessary.

When asked whether they thought that the reviews were helpful to the nursing homes, more of a positive response was reported. Only two State-reviewed homes and two Committee homes felt that the reviews were not helpful. All of the others felt that they were.

Next, we asked whether respondents felt that the reviews resulted in improved patient care. Again, a majority of both types of homes felt that they did. Three Committee homes and one State home felt that they did not.

The next question asked respondents whether they felt that the reviews were held at appropriate time intervals. Sixty percent of State-reviewed homes responding to the question felt that they were, compared with 36% of Committee homes who felt this way. Two of the State homes who felt that time intervals were not appropriate suggested that the six-month reviews were not frequent enough! However, all seven of the Committee-reviewed homes who felt time intervals were not appropriate responded unanimously that reviews were held too frequently.

Next, respondents were asked whether they felt that the reviews were thorough or not. All State-reviewed homes felt strongly that the reviews were very thorough. A majority of the Committee homes also felt this way, but their feelings about this issue were not as strong. Only one Committee-reviewed home felt that the reviews were not thorough.

"Were the findings of the review fair and justified?", we asked. There was more disagreement concerning fair and justified findings among the State-reviewed homes on this question. Three of the State homes felt that they were not always fair and justified. None of the Committee-reviewed homes felt this way, although two of the homes refused to state an opinion. (Of course, it should be remembered that Committee homes were performing only utilization review and also that fewer level of care determinations were made by Committees.)

"Were review records complete and thorough?" All State-reviewed homes felt that they were, and all but two Committee-reviewed homes felt likewise. These two homes felt that their records were not as complete as they should be. All homes were then asked whether they felt that keeping review records was important. All State-reviewed homes felt that they were, but two of the Committee homes disagreed and felt that keeping these records was not useful.

The Role of the Doctor in the Review

Next, some specific questions were asked to determine the roles of the various participants in the review. First, we asked the Committee-reviewed homes about the composition of the Committees. All of the homes reported that there was at least one doctor along with a registered nurse and social worker involved in the Committee, which exceeds Federal requirements. Doctors were reported as always present by the Committees, and as never present

under the State approach. The respondents from the State-reviewed homes also said that the doctor was "rarely" consulted, either by phone or by letter, during or after the review.

Specific questions were then addressed only to the Committee-reviewed homes concerning the role of the doctor in the review. "How much of the review were doctors involved in?" and one home responded "little." "How were they involved?" Nine homes said "in a lead role," one home said, "as an observer, for support," and one home told us that the doctor acted as an "advisor" to the Committee.

Next we asked, "what was the result of the doctor's involvement in the review?" Most of the Committee-reviewed homes felt that the result of the doctor's involvement was "substantial." Six of the eleven homes responded in this manner. Five responded either "some" or "little."

We then asked what happened as a result of the doctor's involvement in the review that would not have happened without the doctor. The majority of homes (8) told us that it was a better review with the doctor present. One home said that the doctor's involvement enabled determination of the right level of care. Two homes said "nothing" happened as a result of the doctor's involvement that would not have happened had the doctor not been present.

Committee homes were then asked, "what if there were no doctor required for the review?" Responses were varied, but seven of the homes felt that this would be bad, one home felt that this would be good, and three did not respond.

"Did the doctor make recommendations about other doctors' actions?" Responses were evenly divided between "occasionally" and "rarely or never" with six homes answering the former way and five the latter way. "Did the doctor visit his own patients at the time of the review?" Four homes indicated that at some times this did happen (which is considered by some administrators as a side advantage of the Committee approach). Five homes responded "never." "What is the relationship of the Committee's registered nurse to the doctor?" Two homes reported "attached" in some way, while the rest specified no particular relationship. "How often does a doctor visit patients other than in the reviews?" The most frequent reply was "monthly" although two homes reported "semi-annually." "Were M.D.'s ever not present for the review when you felt that they were needed?" "Never," was the strong response. Several homes said, "We cancel the review if the doctor is not going to be present." On the other hand, "were doctors present when you felt they were not required?" Four homes responded "occasionally." The rest said "never."

Finally, <u>both State-reviewed homes and Committee-reviewed homes were asked whether they felt that a doctor should be involved in</u>

the reviews. Three of the eleven State-reviewed homes said that they felt that a doctor should be involved (in spite of the fact that they were used to not having a doctor involved under the State approach). One small and two large homes felt this way. The remaining eight State-reviewed homes said no, a doctor should not be involved. All of the Committee-reviewed homes said yes, a doctor should be involved in the review.

For the homes which responded affirmatively to the previous question, we asked "how often" should a doctor be involved. One of the three State homes said "always," and the two others said "rarely, only when needed." The majority of the Committee-reviewed homes responded "always" or "usually." Only two said "occasionally or rarely." "In what capacity should the doctor be involved in the review?" Two of the State-reviewed homes said "only as requested" and the third said "as the on-site leader." "On-site leader" or "as a reference person" was reported by eight of the Committee-reviewed homes. Only three of the Committee homes said "as requested." These findings suggest that the homes prefer their present system of review, regardless of whether it is by the State or by Committee.

Next, all homes were asked how they would rate the reviews. Ratings were equal between the two approaches. All but one Committee-reviewed home rated the reviews as "very good" or "good." The one Committee home rated the reviews as only "fair."

The final question in the interview asked the nursing homes how they would suggest that the reviews be improved. This was an open-ended question, and there were a variety of responses:

"Shorten the reviews," suggested by two large homes presently reviewed by the State;

"Go to the PSRO approach," suggested by two State-reviewed homes and one Committee-reviewed home; all three homes that made this suggestion were small;

"Add other specialists to the review team," suggested by three State-reviewed homes; specialists mentioned were a medical records person, a geriatric specialist, and a health or nutrition specialist;

"Keep better records," suggested by one medium sized Committee-reviewed home;

"Reduce the role of the M.D.," suggested by one large, urban Committee-reviewed home; and

"Go to the Committee-review approach," suggested by one large, urban State-reviewed home.

Conclusions

Several basic conclusions can be drawn from the results of these interviews. In summary, they are as follows:

- Committee reviews occur much more frequently than State team reviews.

- In spite of the difference in frequency, the State team reviews are much more thorough and complete, and better records are kept of these reviews.

- Committee reviews concentrate primarily on utilization review; medical review is rarely if ever addressed. Doctors rarely if ever see patients under this approach.

- Changes in level of care were reported to occur more frequently under the State team approach.

- The necessity of having a doctor present for the reviews is a controversial issue, with the Committee-reviewed homes favoring it and the State-reviewed homes opposing it.

- Many Committee-reviewed homes feel that reviews are held too frequently.

- The distinction between medical and utilization review is not clearly understood by nursing home personnel.

- Homes tend to prefer the review mechanism under which they are presently reviewed.

- Medical reviews are not being done by the majority of the Committee-reviewed homes, and there are certain instances where utilization review is not being adequately performed.

The implications of these findings are further discussed in the conclusions and recommendations of this report.

PART V

COST ANALYSIS

V. COST ANALYSIS

Comparisons of costs associated with the three review approaches were a primary component of this evaluation. The methodology for gathering cost data for this analysis was as follows.

Financial information from the Fiscal Division of the Department of SRS and budgeted costs from the project's continuation requests were examined. Actual project expenditures for travel, phones, and training were found to be available from the fiscal bureau. However, personnel costs associated with the project (other than the nurse consultants) were not available. Since the State accounting system was not able to provide actual expenditure data on personnel associated with the project, the projected salaries and percentages used in the project continuation requests of 1975 (and verified by project staff) were used.

In order to approximate the cost data for constructing Cell 2 (State team with an M.D. on site), the number of consultant physician hours in FY 1975-76 was multiplied by $25 (the rate which the State pays M.D.'s on committees). This figure was added to the cost for Cell 1 to approximate the cost of Cell 2. Indirect costs were not charged against the project, although an indirect cost rate of 43% was established.

Costs for Cell 3, the Committee review approach, were estimated by

approximating the time of M.D.'s and R.N.'s consumed in the review process.

A breakdown of the costs of each Cell is presented below, followed by unit cost analyses and comparisons.

Cell 1: The State Review with Physician as Consultant

Costs are separated into salaried personnel, consulting personnel and expenses. These are itemized below.

3 medical specialists at 50% of their time at $13,000 annually*	$19,500
1 M.D. at 5 hours/mo. at $25/hour	1,500
4 R.N.'s at $7.00/hour X 2000 hours	14,000
1 pharmacist at 5% of his time at $14,000	700
Fringe benefits	1,500
Travel and training costs	4,300
Overhead **	-0-
Total cost of Cell 1 (per annum)	$41,500

* For the medical specialist, the pharmacist, and the M.D., costs are estimated from the project application. Actual costs incurred are not available from the State fiscal bureau of SRS.

** No indirect costs were charged against the project, since it was basically a "waiver only" project.

Cell 2: State Review with a Physician On Site

This Cell is a constructed Cell because funds were not available to implement the Physician-headed team approach. All of the costs described in Cell 1 would be included in this Cell. The cost of additional physician time was superimposed on the costs of Cell 1. It might be argued that cost savings over Cell 1 could occur through the physician assisting with the on-site reviews. However, both the State team members and the consulting physician agreed that these savings would be inconsequential.

The additional physician costs of Cell 2 were estimated in two ways. We first presumed that the same number of hours would be spent in the reviews by physicians as were spent by R.N.'s (2000 hours). If the State paid M.D.'s at the same rate that the physicians on the committees were allowed ($25/hour), the cost would be $50,000. If the State hired M.D.'s full time, they would need one M.D. at the average salary of $33,000, and 50% to 70% of another M.D. at the same salary. Regardless of method, the results are nearly equal.

Cell 2 total annual costs are therefore estimated as follows:

Cell 1 Costs	$40,000
M.D.'s hours X $25/hour X 2000 hours	50,000
	$90,000

or

Cell 1 Costs	$40,000
1.5 Salaried M.D.'s at $33,000	49,500
	$89,500 (per annum)

Cell 3: Committee Review

The costs associated with Cell 3, the committee approach, were divided into two categories: (1) M.D. and R.N. time that could be charged to the State, and (2) nursing home administrators and nursing personnel time spent in preparation for the committee meeting. Each of these categories requires further clarification.

In gathering cost data, we discovered that the actual billing dates from M.D.'s and R.N.'s on review committees are not tabulated or compiled by the State. The information is arranged in a manual 3x5 card file, organized alphabetically by provider name. In many cases the names of all of the M.D.'s and R.N.'s involved in the reviews were not deciferable due to illegible signatures. Therefore, the standard rate of $25 for M.D.'s and $10 for R.N.'s for each review (i.e., 1 hour's service) was used. In the course of checking some M.D.'s and R.N.'s whose names were known, we discovered that not all M.D.'s and R.N.'s charge the State for their service in reviews even though they are entitled to do so. Again, since the actual billing data was not available, we developed the costs based on what the M.D.'s and R.N.'s would receive and which the State would be obligated to pay if billed.

Also, in the course of conducting interviews with nursing home administrators and head nurses, we discovered that both individuals in most homes reported spending time in preparation for the committee

meeting, although the extent of this preparation time varied. This preparation time is unique to the committee approach, and therefore should be added. The hourly compensation rate of R.N.'s was used in computing what the costs of this administrator/R.N. time would be.

The total annual costs estimated for Cell 3 were:

M.D.'s time (191 hours) X $25	$ 4755
R.N.'s time (106 hours) X $10	1060
	$ 5835
Administrators and nursing personnel time (500 hours) X $10	5000
Total Cost	$10835 (per annum)

Using the cost figures generated above, several unit cost measures were also developed in order to conduct a comparative cost analysis. These figures are presented in the table on the following page.

As expected, the total cost of the state team was found to be greater than the cost of the committee approach, since the State reviews many more homes and patients. Also, the costs of Cell 2 are higher than Cells 1 or 3, since it has the same costs as the State team with the additional expense of physicians.

EXHIBIT V-1

COMPARATIVE COST ANALYSIS

UNIT MEASURE	CELL I State Team	CELL II State Team & MD	CELL IIIa Committee (Charg.only)	CELL IIIb Committee (with admin.)
1. Total Cost Per Year	$41,500.	$90,000.	$5,835	$10,835.
2. Cost Per Medicaid Patient-Review:	11.36	24.64	1.88	3.50
3. Cost Per Medicaid Patient Average Per Year	23.21	50.33	13.69	25.43
4. Cost Per Medicaid Patient per day	.063	.138	.037	.069
5. Cost per Nursing Home per year	658.73	1428.57	416.78	773.93
6. Cost per Nursing Home per Month	54.89	119.05	34.73	64.49
7. Cost per Level of Care Change	139.73	303.03	243.12	451.46
8. Cost per Review	334.68	725.80	54.53	101.26

One of the first unit measures developed was the Medicaid Patient Review, which measures the activity of one Medicaid patient being reviewed one time. As is indicated on line 2 of Table V-1, both costs for the committee are much lower than the State team approach. This is true since the more frequent review schedule of the committee skews the measure to the advantage of Cell 3.

In order to compensate for this skewing, we utilized a different approach to yield cost figures based on the average number of Medicaid patients in the homes during the year. This measure allows us to eliminate double-counting associated with more frequent review schedules and arrive at a more meaningful comparison. As the table indicates, the State team approach with an M.D. (Cell 2) is the most expensive. If we only consider the chargeable costs of committees, it is the least expensive approach. However, if the cost of the administrator and nursing personnel's time is also considered, the State approach (Cell 1) becomes slightly less expensive than the committee approach (see line 3). Lines 4, 5, and 6 of Exhibit V-1 have been included to show the same basic relationship as shown in line 3.

Line 7 was developed to reflect costs on a different basis. This measure assumes that a high volume of level of care changes is more desirable than a very low volume, since patients' conditions change and a high volume would therefore indicate that a more thorough review is being conducted. If this premise is accepted, then the

costs shown are significant. The costs of obtaining this desired end are much less (56-73%) for the state approach (Cell 1) than for either of the committee cost estimates.

PART VI

OTHER OBSERVATIONS

VI. OTHER OBSERVATIONS

In the course of this evaluation some observations were noted which were not within the formal scope of the evaluation. Although many of these observations are subjective in nature, nevertheless, we feel that consideration of these observations by SRS would be appropriate. These observations are reported in this section.

Need for Better Interdepartmental Coordination

The State Department of Health and Environmental Sciences (DHES) is responsible for utilization review of Title XVIII (Medicare) extended care facilities. Some confusion occurred when Federal regulations were implemented by DHES in 1973. This implementation involved the formation of three separate physician teams by the Department of Health to develop utilization review committees for all homes licensed for extended care. Many of these homes were also under the medical/utilization review project. If these regulations had been fully implemented, duplication of review endeavors would have occurred for at least 16 nursing homes in Montana.

The issue was resolved but the basic confusion on the part of nursing home administrators and personnel as well as others concerning which Department is responsible for what type of review function still remains.

The Department of Health and Environmental Sciences is also responsible for performing an annual inspection and licensing of all nursing homes. A DHES survey team visits each facility and determines if the facility and the personnel meet Federal and state regulations. If so, a certificate of license is issued. Deficiencies are recorded at that time and must be corrected within a certain time period. Our interviews revealed that many nursing home administrators were very confused over the various roles of SRS and DHES. There appears to be no apparent communication or coordination between the Departments. In fact, many of the same aspects of review are investigated under both systems, resulting in duplication of effort and unnecessary expense.

This problem appears to have arisen due to three factors:

-- overlapping regulations between Title XVIII and Title XIX review requirements;

-- Lack of communication at the state level between DHES and SRS;

-- The issue of hegemony, or the extent of authority of both state departments.

It is obviously in all parties' interests to avoid duplication in adhering to regulations. SRS could take a lead role in resolving this conflict by instigating policy level discussions with DHES with the intent of improving communications between the two departments and coordinating review activities in order to eliminate

potential duplication. Once this issue is resolved at the policy level, the next step would involve communicating these decisions through the state system so that both those doing the reviewing and those being reviewed understand which party is performing which function and where appropriate authority rests.

Multiple Level of Care System

As a result of our conversations with nursing home administrators, we observed a general consensus of opinion on the present multiple level of care system. Many nursing home administrators felt that, although the state assumes nursing homes will have a reduced cost for intermediate care patients compared to skilled care patients (and, therefore, the reimbursement rate for intermediate care patients should be less), nursing homes in fact spend more time and money on intermediate care patients than on skilled patients. In small facilities, it is not feasible to reduce or separate nursing staff to meet different needs of skilled and intermediate care patients. Further, nursing home administrators contend that, since intermediate care patients require more physical therapy and are generally more ambulatory, they are therefore more prone to walking away from the facility or falling and require more nursing care (not necessarily skilled care) than do skilled care patients. Consequently, administrators feel that lower reimbursement rates for intermediate care patients in fact penalizes the home for working hard and improving patients condition and well-being.

Montana SRS personnel do not generally agree with these opinions, and feel that nursing homes could reduce costs for intermediate care patients in accord with the lower reimbursement rates. However, the fact that the majority of nursing home administrators interviewed held the opinions described above is significant and warrants more investigation by the state of the appropriateness of different reimbursement rates for different levels of care.

Adversary System

It is our opinion that the multiple level of care system, in addition to creating financial problems for some nursing homes, also generates a certain amount of "ill will" between the State and the nursing homes. Many nursing home administrators believe that the State is determined to reduce all of the skilled patients to intermediate patients and thereby save dollars. While, on the other hand, some State team members believe that nursing homes continually try to upgrade intermediate care patients to skilled levels in order to gain financial benefits.

Unfortunately, this adversary situation is inherent in a system of multiple levels of care. Nevertheless, efforts should be taken to minimize its effect in order to improve working relationships between the State and nursing homes. Should future regulations establish a single level of care, this will permit the development of a more receptive environment for constructive reviews than is presently the case.

APPENDICES

A. LETTER OF INTRODUCTION FOR URBAN MANAGEMENT

B. INTERVIEW INSTRUMENT

C. RECORDS REVIEW ANALYSIS SHEET

D. LIST OF ALL MONTANA NURSING HOMES

APPENDIX A:

LETTER OF INTRODUCTION FOR URBAN MANAGEMENT

APPENDIX A

STATE OF MONTANA

SOCIAL AND REHABILITATION SERVICES

INTER-OFFICE CORRESPONDENCE

FROM: Jack Dorner, MSW, Project Director
Medical Assistance Bureau

Date October 20, 1975

TO: Montana Nursing Home Administrators & Personnel

RE: Evaluation of the Medical/Utilization Review Project

As you may know, for the past 2½ years the State of Montana has been conducting a Federal Section 1115 Demonstration Project entitled the Medical/Utilization Review Project. One major component of the project is the objective evaluation currently under contract to Urban Management Consultants.

As part of their evaluation effort, representatives of Urban Management Consultants will be contacting you in October or November for the purpose of obtaining information and opinions concerning this project. We request that you give the representatives of Urban Management Consultants your cooperation when they contact you.

If you have any questions or concerns regarding this project or the evaluation activities, please call me or Jim McCabe of this office.

Jack Dorner.

APPENDIX B:

INTERVIEW GUIDE

APPENDIX B

NURSING HOME PROJECT

INTERVIEW GUIDE

Nursing Home Name:

Address:

City: Phone:

Administrator's Name:

Head of Nursing's Name:

Type of Nursing Home:

Type of Review:

General Size of Nursing Home: ( ) Small; ( ) Medium; ( ) Large

Number of SNC Beds:

Number of Medicaid Patients:

Total Beds:

Interview:

Date:

Time:

Length:

Place:

Special Notes:

AWARENESS OF MEDICAL/UTILIZATION REVIEW PROJECT:

1. Are you aware of the state medical utilization review project?

   ( ) Yes; ( ) No

   a. Have reviews been taking place? _____

   b. For how long? _____

   c. Why do you think they have been conducted? _____

ABILITY TO DEFINE MEDICAL AND UTILIZATION REVIEWS:

2. Would you explain what you believe to be a utilization review. How does this differ from medical review?

   _____

   _____

3. Are these reviews conducted simulataeously or separately?

4. How long ago did the last review occur?

   _____ less than a month; _____ 1-3 months; _____ 4-6 months

   _____7-12 months; _____more than 12 months

5. How long between reviews:

   _____ less than a month; _____ 1-3 months; _____ 4-6 months

   _____ 7-12 months; _____ more than 12 months

6. Were you notified of the reviews prior to the review?

   ( ) Yes; ( ) No

   a. If yes, how? ( ) letter; ( ) phone; ( ) other;

      If other, please specify _____

   b. How soon were you notified before the review?

      ( ) Less than a day; ( ) 1-3 days; ( ) 4 days-1 week;

      ( ) more than a week

7. How often is the Administrator present during the review?

( ) always; ( ) usually; ( ) occasionally; ( ) rarely; ( ) never

a. How often is Head of Nursing present?

( ) always; ( ) usually; ( ) occasionally; ( ) rarely; ( ) never

8. What is the Administrator's role in the review?

( ) active participant; ( ) guide; ( ) reference person; ( ) bystander

a. What is the RN's role?

( ) active participant; ( ) guide; ( ) reference person; ( ) bystander

9. How often do you get feedback on the review, such as: recommendations, letters, phone calls, or reports?

( ) always; ( ) usually; ( ) occasionally; ( ) rarely; ( ) never

10. What type of feedback do you get?

_____

_____

11. How long after the reviews does the feedback occur?

( ) less than a day; ( ) 1-3 days; ( ) 4 days - 1 week; ( ) more than a week.

THOROUGHNESS OF REVIEW

12. Is each patient visited in each review?

( ) always; ( ) usually; ( ) occasionally; ( ) rarely;

( ) never

a. If not, how often is each patient visited? _____

13. Who visited the patient? ( ) doctor; ( ) nurse;

( ) entire team

How was the patient visited? _____

14. Were each patient's records examined in each review?

( ) always; ( ) usually; ( ) occasionally; ( ) rarely;

( ) never

a. If not, how often? _____

b. By whom and how? _____

15. How long did each review last per patient?

( ) less than 1 minute; ( ) 1-5 minutes: ( ) 6-10 minutes;

( ) 11-30 minutes; ( ) 31 - 1 hour; ( ) more than an hour

16. How many cases were visited per hour on an average?

( ) 5 or less; ( ) 6-10; ( ) 11-20; ( ) 21-50;

( ) more than 50

17. What kinds of results if any occurred because of the review?

( ) changes in level of care; ( ) improvement in patient care;

( ) change in nursing home procedures

a. How often were results evident?

( ) always; ( ) usually; ( ) occasionally; ( ) rarely;

( ) never

INTERVIEWEE PERCEPTIONS OF REVIEW

18. The reviews are necessary:

( ) strongly agree; ( ) agree; ( ) don't know or no response;

( ) disagree; ( ) strongly disagree

19. Reviews are helpful to my nursing home:

( ) strongly agree; ( ) agree; ( ) don't know or no response;

( ) disagree; ( ) strongly disagree

How are the reviews helpful? _____

_____

20. Does review improve patient care? ( ) Yes; ( ) No

If yes, how? _____

If no, why not? _____

21. Reviews are held at appropriate time intervals:

( ) strongly agree; ( ) agree; ( ) don't know or no response;

( ) disagree; ( ) strongly disagree

a. If not: ( ) too often; ( ) to few

22. Reviews are very thorough:

( ) strongly agree; ( ) agree; ( ) don't know or no response;
( ) disagree; ( ) strongly disagree

23. Findings of the review are fair and justified:

( ) strongly agree; ( ) agree; ( ) don't know or no response;
( ) disagree; ( ) strongly disagree

24. Are review records kept at the nursing home? ( ) Yes; ( ) No

25. Review records are complete and thorough:

( ) strongly agree; ( ) agree; ( ) don't know or no response;
( ) disagree; ( ) strongly disagree

26. Review records are important:

( ) strongly agree; ( ) agree; ( ) don't know or no response;
( ) disagree; ( ) strongly disagree

ROLE OF MD: (If Committee Home, ask the following three questions)

27. What is the composition of the Committee? _____

_____

28. Were MD's on site during the review?

( ) always; ( ) usually; ( ) occasionally; ( ) rarely;
( ) never

OR

29. Were MD's consulted by phone or letter in connection with the review?

( ) always; ( ) usually; ( ) occasionally; ( ) rarely;
( ) never

(ASK QUESTIONS 30 THROUGH 43 OF COMMITTEE HOMES ONLY)

30. For what portion of the review was the MD present, if at all?
( ) all; ( ) most; ( ) some; ( ) a little

31. How were MD's involved?
( ) lead role in the review; ( ) observer/support;
( ) advisor/reference

32. How often are they involved in these roles?
( ) always; ( ) usually; ( ) occasionally; ( ) rarely;
( ) never

33. How much of the review did they spend in that role?
( ) all; ( ) most; ( ) some; ( ) little

34. What was the result of their involvement in this role?
( ) substantial; ( ) some; ( ) little; ( ) none

35. What happened as a result of their involvement in the review that would not have happened without an MD? _____

_____

36. What if there were no MD required for review? _____

_____

37. Do MD's make recommendations about other MD's actions?
( ) always; ( ) usually; ( ) occasionally; ( ) rarely;
( ) never

38. Does the MD visit his own patients at the same time as the review?

( ) always; ( ) usually; ( ) occasionally; ( ) rarely; ( ) never

39. Relationship to Nursing Home? _____

40. How often did he visit his patients other than the review?

( ) weekly; ( ) monthly; ( ) semi-monthly; ( ) annually

41. What is the relationship of the RN to the MD?

( ) RN performs review with MD; ( ) MD performs review with RN; ( ) both perform

42. Were MD's not present when you felt they were needed?

( ) always; ( ) usually; ( ) occasionally; ( ) rarely; ( ) never

43. Were MD's present when you felt they were not required?

( ) always; ( ) usually; ( ) occasionally; ( ) rarely; ( ) never

(ASK THE REMAINING QUESTIONS OF ALL HOMES)

44. Should MD be involved? ( ) Yes; ( ) No

45. How Often? ( ) always; ( ) usually; ( ) occasionally; ( ) rarely; ( ) never

46. In what capacity?

( ) direct on site; ( ) on site observer; ( ) as requested;

( ) other

47. How would you rate the performance of the reviews to date?

( ) very good; ( ) good; ( ) fair; ( ) poor

48. How would you improve the reviews? _____

_____

_____

APPENDIX C:

RECORDS REVIEW ANALYSIS SHEET

APPENDIX C

Medical/Utilization Review Project Records Review

Nursing Home Name_____Reviewed By_____

Date	# of MA's	# of SNC	# of INC	L of C Changes	# of MD's	# of RN's	Type of Records	"Quality" Issues	Admin. Hours

Average # MA's_____

APPENDIX D:

LIST OF ALL MONTANA NURSING HOMES

APPENDIX D

LIST OF MONTANA NURSING HOMES

Review Mechanism: State Nurse-Headed Teams - Western District

Names of Nursing Homes	Location	Urban versus Rural	# SNC Beds	Total MA Beds	Size Class
Community Hospital of Anaconda	Anaconda	Urban	40	68	Medium
Friendship Manor	Bigfork	Urban	40	65	Medium
Crest Nursing Home, Inc.	Butte	Urban	40	103	Large
Silver Bow Annex Nursing Home	Butte	Urban	50	72	Medium
Teton Nursing Home	Choteau	Rural	40	40	Small
Colonial Manor of Deer Lodge	Deer Lodge	Urban	25	39	Small
Cascade Co. Convalenscent Home	Gt. Falls	Urban	229	229	Large
McAuley Nursing Home	Gt. Falls	Urban	41	48	Medium
Park Place N.H. Rehab. Ctr.	Gt. Falls	Urban	65	65	Medium
Valley View Estates N.H., Inc.	Hamilton	Rural	58	98	Large
Hot Springs Manor Health Ctr.	Hot Springs	Rural	39	56	Medium
Libby Convalescent Center	Libby	Rural	60	60	Medium
Hillside Manor	Missoula	Urban	107	107	Large
Mtn. View Extended Care	Missoula	Urban	50	50	Medium
Royal Manor, Inc.	Missoula	Urban	31	51	Medium
Wayside	Missoula	Urban	40	43	Medium
Clark Fork Valley Hospital	Plains	Rural	10	10	Small
Holy Family Home	St. Ignac.	Urban	9	9	Small
North Valley Nursing Home	Stevensv.	Urban	37	57	Medium
Mineral Nursing Home	Superior	Rural	12	12	Small
Colonial Manor Nursing Home	Whitefish	Urban	29	39	Small
Mtnview. Memorial Nurs. Home	White Sulphur Springs	Rural	6	11	Small

APPENDIX D (Cont'd)

LIST OF MONTANA NURSING HOMES

Review Mechanism: State Nurse-Headed Teams - Eastern District

Names of Nursing Homes	Location	Urban versus Rural	# SNC Beds	Total MA Beds	Size Class
Fallon Memorial Nursing Home	Baker	Rural	22	22	Small
Pioneer Nursing Home	Big Timber	Rural	34	34	Small
Liberty Co. Nursing Home	Chester	Rural	24	39	Small
Pondera Pioneer Nursing Home	Conrad	Rural	40	46	Medium
Glacier County Nursing Home	Cut Bank	Rural	12	12	Small
Glacier Rest Home	Cut Bank	Rural	20	22	Small
Dahl Memorial Nursing Home	Ekalaka	Rural	21	21	Small
Rosebud County Nursing Home	Forsyth	Rural	25	25	Small
St. Clare Hospital	Ft. Benton	Urban	20	20	Small
Valley View Home	Glasgow	Rural	40	60	Medium
Glendive Comm. Nursing Home	Glendive	Rural	25	49	Medium
Wheatland Mem. Nursing Home	Harlowton	Rural	31	31	Small
Lutheran Home of Great Shepard	Havre	Urban	60	75	Medium
Garfield County Hospital	Jordan	Rural	4	12	Small
Central Montana Hosp-N.H.	Lewistown	Rural	40	40	Small
Friendship Manor	Miles City	Rural	10	20	Small
Sheridan Mem. Nursing Home	Plentywood	Rural	33	33	Small
Comm. Hospital Nursing Home	Poplar	Rural	20	20	Small
Roundup Mem. Nursing Home	Roundup	Rural	16	16	Small
Daniels Mem. Nursing Home	Scobey	Rural	19	19	Small
Toole County Nursing Home	Shelby	Rural	21	32	Small
Richland Homes, Inc.	Sidney	Rural	40	85	Large
Prairie Comm. Nursing Home	Terry	Rural	10	10	Small

APPENDIX D (Cont'd)

LIST OF MONTANA NURSING HOMES

Review Mechanism: State Physician-Headed Team

Names of Nursing Homes	Location	Urban versus Rural	# SNC Beds	Total MA Beds	Size Class
Bozeman Convalescent Center	Bozeman	Urban	28	53	Medium
Gallatin County Rest Home	Bozeman	Urban	56	56	Medium
Western Care Nursing Home	Helena	Urban	68	108	Large
Cooney Convalescent Home	Helena	Urban	41	63	Medium

Review Mechanism: Local Review Committees

Names of Nursing Homes	Location	Urban versus Rural	# SNC Beds	Total MA Beds	Size Class
Glendeen Nursing Home	Billings	Urban	36	36	Small
St. John's Lutheran Home	Billings	Urban	44	87	Large
Valley Conv. Nursing Home	Billings	Urban	98	98	Large
Western Manor Nursing Home	Billings	Urban	158	158	Large
Yellowstone Co. Nursing Home	Billings	Urban	50	59	Medium
Sweet Mem. Nursing Home	Chinook	Urban	34	34	Small
Parkview Acres Conv. Nursing H.	Dillon	Rural	39	54	Medium
Big Horn Co. Mem. Nursing Home	Hardin	Urban	10	10	Small
Harlem Rest Home	Harlem	Urban	20	67	Medium
Flathead Co. Nursing Home	Kalispell	Urban	49	66	Medium
Immanuel Lutheran Home	Kalispell	Urban	53	89	Large
Laurel Nursing Home	Laurel	Urban	29	29	Small
Valley Vista Manor	Lewistown	Rural	90	96	Large
Friendship Manor	Livingston	Urban	62	75	Medium
St. Joseph Nurs. Retirement Ctr.	Polson	Rural	80	80	Large
Carbon Co. Mem. Nursing Home	Red Lodge	Rural	24	24	Small